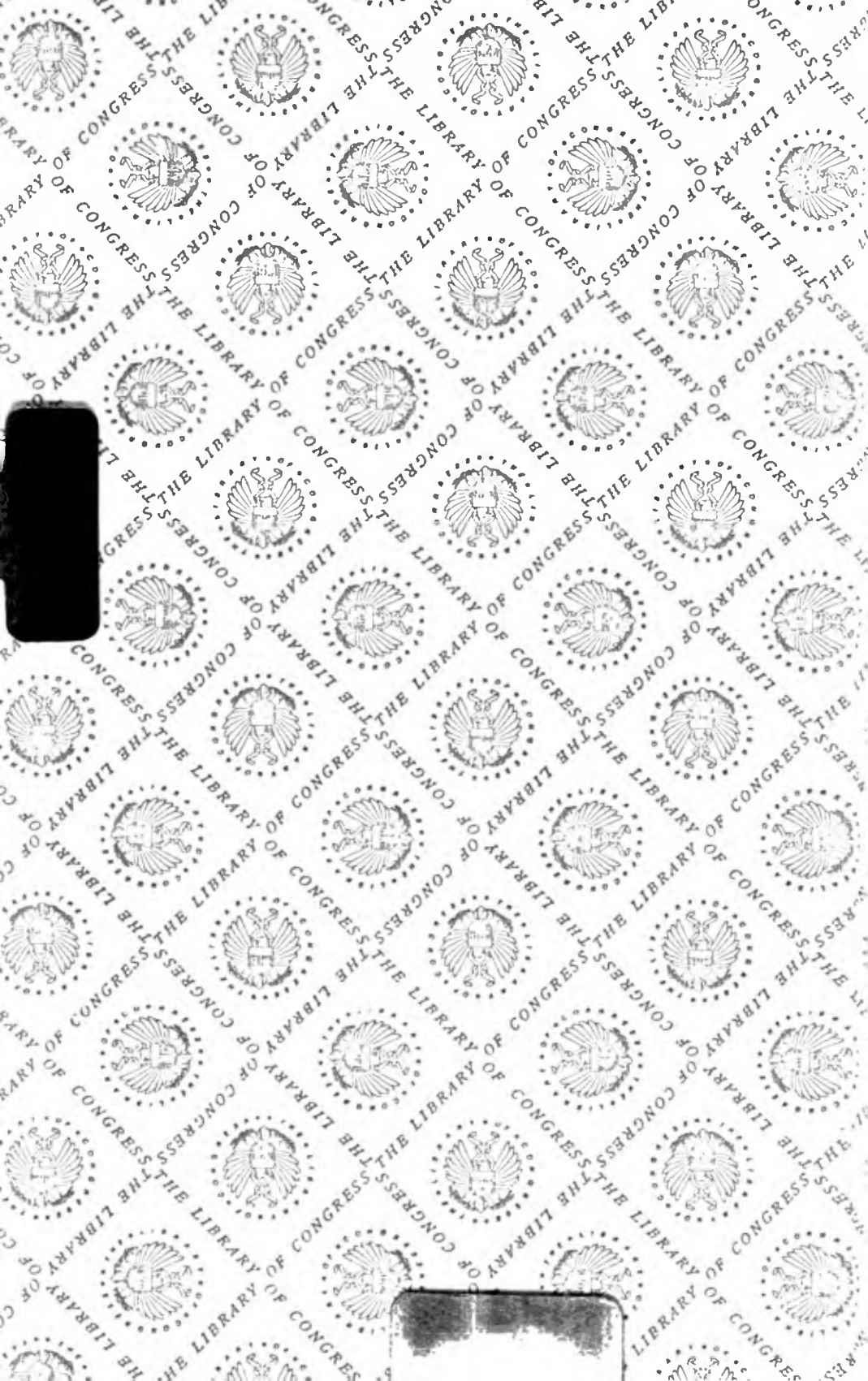

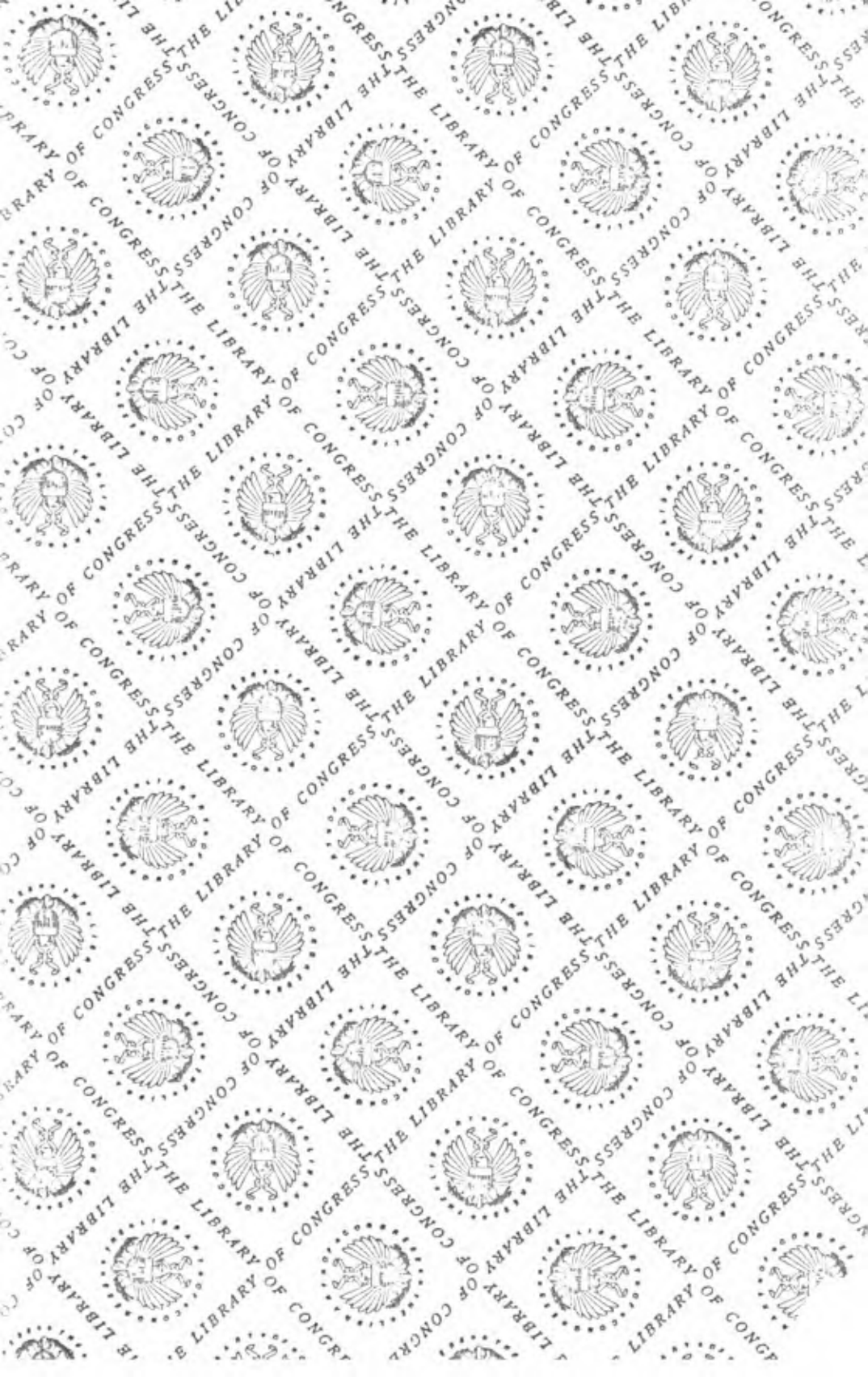
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RAILROAD SAFETY

HEARING

BEFORE THE

SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE

OF THE

COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE HOUSE OF REPRESENTATIVES

NINETY-SIXTH CONGRESS

SECOND SESSION

ON

THE SAFETY OF OUR RAILROAD SYSTEM

MARCH 25, 1980

Serial 96–172

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RAILROAD SAFETY

TUESDAY, MARCH 25, 1980

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE
Washington, D.C.

The subcommittee met at 9:35 a.m., pursuant to notice, in room 2322, Rayburn House Office Building, Hon. James J. Florio, chairman, presiding.

Mr. FLORIO. The subcommittee will come to order.

I would like to welcome our witnesses here today to discuss a matter of major interest to us all—the safety of our railroad system. A number of tragic accidents in the past few years has made this a matter of great public concern.

Fortunately, some progress is being made that should prevent the recurrence of the tragic results of some of the past accidents—particularly through the tank car retrofit program. However, there are other types of tank cars not covered by the program that may present equivalent dangers.

It has been suggested that a number of serious accidents are caused by human factors, including alcohol abuse. We hope to focus on ways, preferably voluntary, that can cut down the number of these tragedies.

Other factors can also contribute to accidents. Bad track condition caused by deferred maintenance—common on marginal railroads—is one example. In fact, there is a positive correlation between a railroad's profitability and its safety record. It may be that one of the best ways to insure safety is to give carriers the tools to better their financial performance—perhaps through elimination of much of the economic regulations that have stifled the industry.

The subcommittee also intends to review the administration's requested authorization for the Federal Railroad Administration's Office of Safety along with some proposed legislative changes; the concerns of labor about the safety of railroad employees and their suggested legislative changes.

I would like to welcome our first witness, Mr. John M. Sullivan, Administrator of the Federal Railroad Administration of the Department of Transportation.

STATEMENT OF JOHN M. SULLIVAN, ADMINISTRATOR, FEDERAL RAILROAD ADMINISTRATION, DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY ROBERT E. PARSONS, ASSOCIATE ADMINISTRATOR FOR RESEARCH AND DEVELOPMENT; JOSEPH W. WALSH, ASSOCIATE ADMINISTRATOR FOR SAFETY; RAYMOND K. JAMES, CHIEF COUNSEL, AND LEON D. SANTMAN, DIRECTOR, MATERIALS TRANSPORTATION BUREAU

Mr. SULLIVAN. Thank you, Mr. Chairman. With me today are Bob Parsons, Joe Walsh, Ray James, and Lee Santman.

Mr. Chairman, if I may I will quickly highlight the remarks contained in my formal opening statement and submit the full statement for the record.

Mr. Chairman and members of the committee, I am pleased to appear before you today to testify on our draft bill entitled the "Federal Railroad Safety Authorization Act of 1980." It consists of authorization requests for fiscal years 1981 and 1982 and several amendments designed to improve the FRA enforcement capability.

We are requesting an authorization of $28 million for fiscal year 1981, $15.8 million of which is for salaries and related expenses of field personnel; $5.9 million for the automated track inspection program; $4.3 million for salaries and related expenses of safety headquarters personnel together with data gathering and dissemination, planning, and evaluation activities and administration of the grants-in-aid program; and $2 million for grants to States. For fiscal year 1982, we are requesting authorization of such sums as may be necessary.

In the past, $10 million per year has been authorized for safety research and development undertaken pursuant to the Federal Railroad Safety Act of 1970, while most R. & D. has been funded under the DOT Act. The Department recommends that the specific R. & D. authorization be deleted from the Safety Act and reliance be placed on the DOT Act for R. & D. authorization.

The total number of reportable railroad accidents decreased from 11,333 in 1978 to a projected 9,917 in 1979. The projected number of accidents in 1979 is based on 11 months of actual data. Track-caused accidents accounted for 41.5 percent of the total in 1979.

There is a correlation between individual carrier's profitability and their respective accident rates. The increase in the number of accidents that can be attributed to defects in way or structure over recent years compared with other causes provides clear evidence of an undermaintained and deteriorating rail plant. The railroad industry faces a capital shortfall over the decade 1976–1985 of $13 to $16 billion; the return on invested capital is among the lowest of major industries.

The industry's difficulties in earning an adequate return on existing investment stem in part from Federal regulation which has constrained management ability to adjust rates, merge corporate entities, provide new services, and abandon obsolete facilities and services. The administration supports the effort of this committee to free the industry from the outmoded constraints that keep the railroads from using innovative marketing techniques which they need to compete effectively.

While FRA agrees that the financial condition of the railroad

industry is basic problem behind the poor safety performance of many carriers, the poor financial condition of the industry makes all the more important FRA's insistence that minimum safety conditions be met. Otherwise the industry is tempted to put its money in areas with a higher short-term revenue benefit and rely on good luck to keep down the number of accidents. The financial penalties which FRA assesses for noncompliance with its safety standards help to provide the railroad mechanical and engineering departments, which are responsible for repairs, with justification for increased maintenance budget allocations.

Our total civil penalty collections for calendar year 1979 set a new record of over $7.5 million. Since October 1977, FRA has collected $5 million more in civil penalties than it did in its first 10 years of existence.

The most impressive achievement has been in the area of hazardous materials. In calendar year 1979 we collected $634,020 for 258 violations. This is over twice the amount of all fines and penalties for violations of the hazardous materials regulations in the previous 12 years of FRA history.

Recently, the FRA has deliberately focused resources on a few carriers with poor safety records. This method of concentrated monitoring has produced dramatic results and will enhance future enforcement efforts. Systemwide assessments of three railroads were completed in 1979. Assessments of the Chicago, Rock Island, and Pacific Railroad, the Illinois Central Gulf Railroad and the Louisville and Nashville Railroad, L. & N., included analyses of track, equipment, signals and operating practices. A number of improvements were made by these carriers following the FRA analysis. FRA's assessment of the L. & N., in conjunction with Emergency Order No. 11, led to a 40-percent reduction in the number of accidents on that line.

While L. & N. had reported 465 train accidents in the first 7 months of 1978, the railroad reported only 285 accidents in the first 7 months of 1979. Over the same period, reportable damages were down from $14.8 million to $7.3 million. Fatalities fell from 17, 16 of which were at Waverly, Tenn., to none reported. Injuries fell from 74 to 6.

In late 1978, the Congress mandated a study of the size, weight and length of railroad freight cars under section 10 of the Federal Railroad Safety Authorization Act of that year. The report of the study has now been transmitted to the Congress by the Secretary of Transportation.

In summary, we found that the growth in car size has not had a significant net impact on facilities resulting from railroad operations. However, there is no question that heavier axle loadings are seriously aggravating deferred maintenance of track and roadbed, and contributing to the overall train accident picture. Proper responses to this problem appear to fall into two categories.

First, track maintenance and internal rail inspections must keep pace with increased dynamic loadings. For most mainline operations, heavier cars will necessitate heavier rail sections, continuous welded rail, and better attention to roadbed. Of course, it would not be feasible or prudent for the Federal Government to control maintenance and rehabilitation programs. The FRA can

only insist that realistic standards for track and structures and realistic inspection procedures be observed.

A second clear area of need identified by the study is the performance of certain "bad actor" cars, particularly covered hopper cars. In the near future, we hope to be able to announce a cooperative venture which will further isolate the most critical design problems and develop a program for addressing those cars most in need of attention.

Mr. Chairman, this completes my prepared statement. Mr. Bob Parsons, associate administrator for R. & D. is here today and I would like to have Bob spend a few minutes briefly explaining the findings of the car size study to the committee. Then we would be happy to respond to your questions.

[Testimony resumes on p. 37.]

[Mr. Sullivan's prepared statement and attachment follow:]

STATEMENT OF ADMINISTRATOR
JOHN M. SULLIVAN
FEDERAL RAILROAD ADMINISTRATION

March 25, 1980

Before the House Subcommittee on Transportation and Commerce, Committee on Interstate and Foreign Commerce - FY 1981 and 1982 Safety Authorization Request

Overview

Mr. Chairman and members of the Committee, I am pleased to appear before you today to testify on our draft bill entitled the "Federal Railroad Safety Authorization Act of 1980." It consists of authorization requests for Fiscal Years 1981 and 1982 and several amendments designed to improve the FRA enforcement capability.

We are requesting an authorization of $28.0 million for FY 1981, $15.8 million of which is for salaries and related expenses of field personnel; $5.9 million for the Automated Track Inspection Program; $4.3 million for salaries and related expenses of safety headquarters personnel together with data gathering and dissemination, planning and evaluation activities and administration of the Grants-in-aid program; and $2.0 million for grants to states. FY 1982, we are requesting authorization of such sums as may be necessary.

In the past, $10 million per year has been authorized for Safety Research and Development (R&D) undertaken pursuant to the Federal Railroad Safety Act of 1970, while most R&D has been funded under the DOT Act. The Department recommends that the specific R&D authorization be deleted from the Safety Act and reliance be placed on the DOT Act for R&D authorization.

Before discussing the specific amendments included in the bill, I would like to first outline the accident trends and then highlight some of our accomplishments since my last appearance here.

Train Accidents

The total number of reportable railroad accidents decreased from 11,333 in 1978 to a projected 9,917 in 1979. The projected number of accidents in 1979 is based on 11 months of actual data. The apparent decrease in 1979 may be somewhat misleading due to the adjustment in the reporting threshold from $2,300 in 1977 and 1978 to $2,900 in 1979. However, since the 1979 numbers indicate a decrease from

10,422 accidents in 1977, which is a comparable base year, it appears that the total number of accidents has, in fact, decreased slightly. Track-caused accidents accounted for 41.5 percent of the total in 1979, equipment accidents comprised 18.9 percent, human factors accounted for 27.4 percent, with the remaining 12.2 percent due to miscellaneous causes. Accidents in the miscellaneous category include collisions at grade crossings above the reporting threshold, vandalism, "load shifted" and acts of God. The projected property damage for 1979 is $302.8 million with $110 million, or 35.4 percent, related to track-caused accidents.

We also accumulate accident data on all grade crossing accidents, including those below the reporting threshold. Grade crossing accidents account for almost two-thirds of the total fatalities (65 percent) and approximately 30 percent of the total injuries. In 1978, there were 12,435 grade crossing accidents resulting in 1,021 fatalities and 4,256 injuries. These numbers are projected to have decreased in 1979 to 11,839 accidents, 781 fatalities, and 3,903 injuries.

It should also be noted that of all injuries in railroad accident/incidents, over 90 percent are to railroad employees.

Compliance Resources

FRA currently has a Federal field force of 8 Regional Directors, 288 inspectors and clerical support of 51. Federal compliance resources are supplemented by 55 state track inspectors and 29 state equipment inspectors. A major thrust is underway to recruit an additional 25 Federal inspectors. We also hope to increase the level of state participation substantially in FY 1980.

System-Wide Safety Assessments

Traditionally, primary emphasis has been placed on monitoring field activity and enforcement of the regulations. Inspections are intended to determine if a railroad has complied, and if not, to make a judgment about appropriate remedial action. Recently, FRA has deliberately focused resources on a few carriers with poor safety records. This method of concentrated monitoring has produced dramatic results and will enhance future enforcement efforts. System-wide assessments of three railroads were completed in 1979. Assessments of the Chicago, Rock Island and Pacific Railroad, the Illinois Central Gulf Railroad and the Louisville and

Nashville Railroad (L&N) included analyses of track, equipment, signals and operating practices. A number of improvements were made by these carriers following the FRA analysis. FRA's assessment of the L&N, in conjunction with Emergency Order No. 11, led to a 40 percent reduction in the number of accidents on that line.

Development of System Safety Plan

FRA's safety improvement efforts will be further enhanced by the progress being made in developing a System Safety Plan (SSP) which will be completed by the end of 1980. The most significant findings to date under the SSP concern the transport of hazardous materials. The flow of hazardous materials by various carriers has been determined and graphically displayed. A study of the effect of rerouting hazardous materials traffic in order to avoid population centers has also been completed. In this study, such rerouting was found to be counterproductive; it actually resulted in an increased number of expected casualties. It was also

determined, however, that risks involving hazardous materials train accidents are concentrated among relatively few railroads, and often to specific lines on these railroads. Five large carriers account for over half of the "hazmat" car-miles and most of these car-miles involve only part of each railroad's overall network. Efforts to improve rail safety can be focused on areas where "hazmat" movements are relatively concentrated.

State Participation

FRA's strategy for improving the effectiveness of the State Participation Program is detailed in our recent report to Congress. The report clearly defines the Federal and State roles, and describes the steps FRA will take to ensure the success of the program.

Emergency Response

In the area of emergency response training, FRA conducts seminars involving local officials throughout the country and participates with the National Hazardous Materials

Response Center in maintaining a 24-hour response network to assist local officials. Also, DOT, through the Materials Transportation Bureau of the Research and Special Programs Administration (RSPA), offers a 20-hour course entitled "Handling of Hazardous Materials Emergencies." I have with me today Lee Santman, Director of the Materials Transportation Bureau, representating RSPA to answer any questions concerning the hazardous materials program.

Pressure Tank Car Retrofit

When I last appeared before this committee to testify on railroad safety issues, a series of hazardous materials accidents had pointed to the need for expedited action to apply the safety systems mandated under Docket No. HM-144. On April 7, 1978, FRA conducted a special safety inquiry into the retrofit timetable for specification 112 and 114 pressure tank cars. On May 11, 1978, the Materials Transportation Bureau of the Department published a Notice of Proposed Rulemaking which advanced new target dates for completion of the retrofit. The final rule amendment, mandating an accelerated retrofit, was published on July 13, 1978.

I am happy to be able to report that the retrofit effort is now moving toward completion. All 112 and 114 tank cars now have shelf couplers designed to resist vertical disengagement. As of January 1, 1980, 13,341 cars had received tank head protection. That is a completion rate of over 75 percent for the application of head protection to cars in flammable gas and anhydrous ammonia service. Application of thermal protection is also proceeding as planned. By the first of this year, well over 75 percent of those cars requiring thermal protection had received it.

Given the present pace of retrofit, it is clear that most of the remaining cars will be equipped with head protection or thermal protection well before the end of this year. A strict deadline of December 31 of this year will be enforced for all cars subject to the retrofit program.

Throughout the progress of the retrofit, the Department has refused to be stampeded, either by those who urged unrealistic deadlines which might have seriously disrupted the Nation's transportation capability for critical fuels

and fertilizer, or by those few who contended that the job could not be done and that extra time was essential. As a result, the majority of tank car owners and lessees, who wanted to do a quality retrofit in an expeditious but orderly manner, have responded positively to the accelerated schedule.

Safety and Profitability

Although the deterioration of railroad safety performance is a symptom of fundamental railroad problems such as operating discipline and maintenance of plant and equipment, the large increase in the train accident rate over recent years that can be attributed to defects in way or structure compared with other causes, provides clear evidence of an undermaintained and deteriorating rail plant. A study, conducted as a part of the System Safety Plan development, shows a definite correlation between individual carriers profitability and their respective accident rates. The railroad industry faces a capital shortfall over the decade 1976-1985 of $13 to $16 billion; the return on invested capital is among the lowest of major industries. The industry's difficulties in earning an adequate return on existing investment stem

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in part from Federal regulation which has constrained management ability to adjust rates, merge corporate entities, provide new services, and abandon obsolete facilities and services. In addition, the Government has provided right-of-way facilities for highways and waterways that - in cases where adequate user charges are absent - have subsidized the railroad industry's principal competitors. The Administration supports the effort of this Committee to free the industry from the outmoded constraints that keep the railroads from using innovative marketing techniques which they need to compete effectively.

While FRA agrees that the financial condition of the railroad industry is a basic problem behind the poor safety performance of many carriers, the poor financial condition of the industry makes all the more important FRA's insistence that minimum safety conditions be met. Otherwise the industry is tempted to put its money in areas with a higher short-term revenue benefit and rely on good luck to keep down the number of accidents. The financial penalties which FRA assesses for non-compliance with its safety standards help to provide the railroad mechanical and engineering departments, which are responsible for repairs, with justification for increased maintenance budget allocations.

Civil Penalty Enforcement

When I last appeared before this Committee to testify on railroad safety, I reported a record year in safety enforcement. FY 1977 saw an increase in civil penalty collections to over $3.4 million, more than twice the previous record. I can now report two more record years, in each of which FRA more than doubled the amount collected in FY 1977. In FY 1978, FRA collected $7,543,439 in civil penalties through settlements, administrative assessments and court judgements. While heavy litigation related to Emergency Order No. 11 held collections in FY 1979 below record levels, our total collection for the twelve months comprising Calendar Year 1979 set a new twelve-month record of $7,551,132. In fact, just since October of 1977, FRA has collected $5 million more in civil penalties than it did in the first ten years of its existence.

Although these civil penalties included increases in the amounts collected under the older safety statutes and under the Federal Railroad Safety Act of 1970, the most impressive achievement has been in the area of hazardous materials. Prior to January 3, 1977, our sole means of enforcing the Department's Hazardous Materials Regulations was to seek the imposition of criminal penalties in the courts. Due

to the already strained resources of the Department of Justice and the courts, the fines collected were nominal. Following FRA's issuance of procedures for handling these claims administratively, FRA attorneys greatly increased both the number of claims handled and the amounts assessed. In FY 1978, the first twelve month period for which civil penalties were an available enforcement tool, FRA handled 115 violations of the Hazardous Materials Regulations, collecting a total of $237,200.

In FY 1979, we assessed a total of $489,655 for 159 violations. Computed on a calendar year basis for the twelve months of 1979, we collected $634,020 for 258 violations. This is over twice the amount of all fines and penalties for violations of the Hazardous Materials Regulations in the previous twelve years of FRA history.

Last year, the first adjudicatory hearing was held under the Hazardous Materials Transportation Act. The matter is now before me on appeal. Other proceedings have been handled through informal responses and assessments by the Office of Chief Counsel.

In addition to our aggressive enforcement of the railroad safety laws and regulations, we have an obligation to make sure that regulations on the books are appropriate and necessary for contemporary conditions. I would like to return to that theme later in my testimony.

Emergency Orders

Since the last railroad safety hearings in the Spring of 1978, the FRA has issued four additional emergency orders addressing serious conditions that could not be abated quickly by less forceful means.

On April 26, 1978, we issued Emergency Order No. 8, which banned the transportation of hazardous materials over defective trackage of the New York, Susquehanna and Western Railroad Company. With the help of financial assistance from the State of New Jersey, the railroad gradually restored the affected trackage and resumed normal operations.

On May 23, 1978, we issued Emergency Order No. 9, which prohibited the transportation of hazardous materials over the Raritan Branch of Consolidated Rail Corporation due to seriously unsafe track conditions. Emergency Order No. 10 of November 2, 1978, banned hazardous material traffic

from the Conrail Black Rock Branch in Buffalo, New York. In both of these instances, Conrail quickly made the necessary repairs and was authorized to resume normal operations.

On February 7, 1979, we issued Emergency Order No. 11, which addressed a pattern of unsafe conditions and practices on the property of the Louisville and Nashville Railroad Company (L&N). Based on our assessment that safety deficiencies permeated rail operations across the L&N system, we imposed two major requirements on the railroad. First, we required the L&N to conduct a walking inspection of its entire track system and to correct the deficiencies discovered. As an adjunct to the walking inspection, which was to require several months for completion, we mandated more frequent regular inspections of track to assure the detection of developing problems prior to their becoming critical.

Second, we required that trains containing one or more hazardous materials cars be limited to speed restrictions of thirty (30) miles per hour. The primary purpose of the order was to reduce the amount of damage caused by derailments, and thus reduce the probability that hazardous materials would be released.

The administration of the emergency order was characterized by intense litigation on the one hand and, on the other hand, by very active discussions between the L&N and FRA. These discussions were directed toward elimination of the problems that necessitated the order. FRA inspectors and safety program managers spent many days engaged in investigations across the breath of the L&N system and in conferences with L&N officials. The resulting dialogue led to the clearer identification of a number of underlying problems and the institution of remedial efforts. As conditions improved, FRA began lifting the order from portions of the L&N system.

The litigation went through several phases. On February 26, 1979, a divided panel of the United States Court of Appeals for the District of Columbia Circuit temporarily stayed the portion of the emergency order which limited the speed of hazardous materials trains. It was not until April 4, 1979, that the full Court of Appeals overturned the panel and reinstated the order pending proceedings on the merits in the lower court. On June 18, 1979, prior to the completion of the administrative review proceedings which had briefly convened in February and resumed in early June, the United States District Court for the District of Columbia declared the order invalid.

The Government's petition for a stay of the District Court judgment pending appeal was denied on August 1, 1979, by a two-to-one vote of the same panel of the Court of Appeals which had stayed the emergency order in the first instance. By the time opinions were forthcoming from the Court of Appeals on January 8, 1980, over five months after the stay had been denied, FRA faced a substantially changed situation. The L&N safety record, although by no means perfect, had shown marked improvement.

While L&N had reported 465 train accidents in the first seven months of 1978, the railroad reported only 285 accidents in the first seven months of 1979. Over the same period, reportable damages were down from $14.8 million to $7.3 million. Fatalities fell from 17 (16 of which were at Waverly, Tennessee) to none reported. Injuries fell from 74 to 6. All of the foregoing statistics reflect only the consequences of train accidents with grade crossing accidents excluded. In short, it was clear that progress was being made and that further litigation in support of the emergency order was no longer required.

We believe that decisive action was appropriate to address the safety issues identified in the text of the order and established by evidence in the administrative review proceedings.

It should be added that issuance of emergency orders has significant effects beyond the individual railroads made subject to particular orders. The clear resolve of FRA to employ the emergency powers in appropriate cases has often made use of those powers unnecessary. In a number of instances, the prospect of emergency action has had the effect of producing prompt and significant improvements in safety. These are successes which are most gratifying to the FRA.

SAFETY RULEMAKING

Regulatory Reform

Since the issuance of Executive Order No. 12044 on March 23, 1978, the FRA has taken a series of actions designed to implement the policy objectives of the President concerning regulatory reform. FRA began by announcing a General Safety

Inquiry for the purpose of updating the railroad safety regulations and deleting those requirements which were based on maintenance standards rather than immdiate safety concerns. During the period June 1978 through February 1979, five major public hearings were held covering locomotives, freight cars, safety appliances, power brakes, track, and signal systems.

Rulemaking is now underway in the crucial areas of Freight Car Safety Standards and Track Safety Standards, as well as locomotive inspection.

Freight Car Safety Standards

The primary goal of FRA in the freight car area has been to eliminate regulations dealing with maintenance, which are in part derived from industry practices of several years ago. This is in order to concentrate on the safety performance of the railroads rather than the means used to achieve safety.

The revised freight car rules were published on December 31, 1979. Two petitions for reconsideration of the final rule have been filed. We will rule on these petitions within the next few weeks.

Locomotive Inspection Regulations

Locomotive inspection requirements are one of the oldest areas of Federal safety regulation, dating back to 1911. The locomotive revision effort is in the final stage of the regulatory process; a final rule will be issued in the very near future.

Track Safety Standards

The FRA has received extensive comments on the proposed revisions to the Track Safety Standards published for public comment in September of 1979. The areas of principal concern to the commenters were: the elimination of the knowledge requirement for liability; regulation of track on private industrial property; the use of rail weight to determine speed limitations; the elimination of the differential between maximum speeds for passenger and freight trains; and the increased costs said to be associated with the proposed revisions.

The FRA found much of the analysis submitted in support of the commenters' positions to be persuasive. As a result, we have decided to withdraw the Notice of Proposed Rulemaking and reevaluate our approach to revision of the Track Safety Standards.

Safety Glazing

On December 31, 1979, FRA published final rules requiring the progressive installation of improved glazing materials in the windows of locomotives, passenger cars and cabooses. The purpose of this rule is to protect the occupants of rail vehicles from death or serious injury resulting from objects thrown at railroad trains or objects suspended from bridges. The new glazing will also resist intrusion by small caliber bullets.

This rulemaking resulted from a joint petition filed by the Association of American Railroads and the Railway Labor Executives' Association, both of which were active participants in the proceedings. The technical basis for improved glazing standards was provided by the FRA research and development program.

Safety Research

-Car Size Study-

In late 1978, the Congress mandated a study of the size, weight and length of railroad freight cars under Section 10 of the Federal Railroad Safety Authorization Act of that year. The basic work on the study was completed within the twelve-month period specified in the law, and the report of the study has now been transmitted to the Congress by the Secretary of Transportation.

In summary, we found that the growth in car size has not had a significant net impact on fatalities resulting from railroad operations. However, there is no question that heavier axle loadings are seriously aggravating deferred maintenance of track and roadbed, and contributing to the overall train accident picture. Proper responses to this problem appear to fall into two categories. First, track maintenance and internal rail inspections must keep pace with increased dynamic loadings. For most mainline operations, heavier cars will necessitate heavier rail sections, continuous welded rail, and better attention to roadbed. Of course,

it would not be feasible or prudent for the Federal government to control maintenance and rehabilitation programs. The FRA can only insist that realistic standards for track and structures and realistic inspection procedures be observed.

A second clear area of need identified by the study is the performance of certain "bad actor" cars, particularly, covered hopper cars. In the near future, we hope to be able to announce a cooperative venture which will further isolate the most critical design problems and develop a program for addressing those cars most in need of attention.

-FAST-

One of the most important accomplishments in the R&D area as it impacts safety improvement, is the progress being made on the Facility for Accelerated Service Testing (FAST). In just three and a half years of testing, we have accumulated the equivalent of 22 years of in-service experience. Important findings regarding track structure and equipment maintenance, applicable to the entire industry, have been generated by this testing program. Over 30 major results from FAST have been implemented by railroads and suppliers to improve safety and efficiency.

Finally, I would like to discuss the specific amendments included in this proposed authorization bill.

Proposed 1980 Safety Amendments

The amendments included in our bill are intended to modernize, clarify and strengthen the enforcement powers of the FRA related to railroad safety. The principal amendments would:

- Permit the United States to bring a single suit for multiple civil penalties in the jurisdiction where the railroad has its principal executive office, as an alternative to bringing suit in a number of separate judicial districts where the violations occurred.

- Provide civil penalty sanctions for violations of those provisions of the Hours of Service Act relating to employee sleeping quarters.

- Provide explicit compliance order and injunctive relief authority for enforcement of the older railroad safety laws.

- Extend the period within which negotiations may be conducted on claims under the Hours of Service Act, without the necessity of bringing suit, where notification of the violations has been provided in a timely fashion.

- Eliminate certain unnecessary reporting requirements under the Locomotive Inspection Act.

- Clarify the power of the Secretary to issue emergency orders in the full range of circumstances that may present an immediate threat of death or serious injury.

A technical amendment would also consolidate the safety-related investigative and administrative powers of the Secretary under the Interstate Commerce Act into the Federal Railroad Safety Act.

Attached to this testimony is a copy of our draft bill, together with a section-by-section analysis, detailing the basis and scope of each of the amendments which we are requesting. We have also attached our comments on safety bills pending before the Committee.

Mr. Chairman, this completes my prepared statement. My associates and I will be happy to respond to any questions which the Committee may have.

State Participation - A Grant-In-Aid Program Involving States In Rail Safety Inspection

Congress directed the Federal Railroad Administration (FRA) to increase its efforts to make the State Participation Program effective and report no later than December 1, 1979, concerning the steps that have been taken to enhance the program. This report includes a discussion of how some recent FRA initiatives are proving fruitful in furthering the State Participation Program.

Statutory Scheme

Section 206 of the Federal Railroad Safety Act of 1970 (the Act) gives the states a right to "participate in carrying out investigative and surveillance activities in connection with any rule, regulation, order or standard prescribed by the Secretary" under the Act. At the same time, a continuing active role by the Department of Transportation is envisioned. The Secretary is required to retain the exclusive authority to assess and compromise penalties and to request injunctive relief.1/ In addition, Subsection 206(e) provides that "The Secretary is authorized to conduct such monitoring of state investigative and surveillance practices and such other inspection and investigation as may be necessary to aid in the enforcement of the provisions of this title."

FRA's approach to the administration of the program must follow the philosophy embodied in the statute. First, FRA must be faithful to the mandate of Congress which requires that states capable of making a contribution are permitted to contribute. Second, FRA must retain the enforcement prerogatives set out in the statute recognizing that it is finally responsible, as the Secretary's agent, for the conduct of the entire Federal safety effort.

1/ If the Secretary fails to act within ninety days of the date of violation, the participating state may bring a penalty or injunctive action in a Federal court. State-originated enforcement actions are given expedited handling. No state has ever brought suit under this provision.

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Role Definition

FRA's continued overall responsibility for improving railroad safety demands that FRA have the flexibility to assign its inspectors where the need is the greatest. Even in those states which have achieved full certification, a continued Federal presence is likely to ensure uniform application of Federal regulations. Of course, the level of such a presence will vary considerably from state to state depending on the safety condition of railroads within the state, the degree of certification achieved, the level of experience of the state inspectors, and related factors.

The fact that FRA will continue to be legally responsible for conducting inspections in all states must be clearly understood. A fundamental problem in the administration of the State Participation Program has been defining the respective roles of the Federal field force and the state railroad inspection authorities. Some state safety program managers now believe that the ultimate objective of the State Participation Program is for the states to assume responsibility for all day-to-day compliance activities. This is not correct. The role of the states must be to supplement FRA efforts up to a point at which the combination of state and FRA resources are engaged in an optimally effective safety compliance program.

FRA's Role

FRA's major responsibilities in ensuring the success of the State Participation Program are: 1) recruitment, 2) training, 3) monitoring, 4) coordination with regional activities, and 5) management of the national inspection program.

Recruitment

Current state salary levels make it difficult to attract highly qualified candidates for state inspector positions. Some states have suggested that the Federally mandated employee qualifications should be liberalized. However, FRA has found that when an inspector cannot authoritatively address a wide range of safety related issues (see Appendix I)

to railroad officials, the entire safety program loses credibility. Rather than relaxing current standards, FRA believes that it is better to concentrate on providing improved training and the recruitment of especially able trainees. State employees with engineering degrees or similar technical qualifications, who may now be assigned to other transportation related departments within the state, may be desirable candidates for inspector training.

Training

FRA will continue to provide 100 percent funding for state inspector training at the Transportation Safety Institute (TSI) at Oklahoma City, Oklahoma. TSI is an excellent training facility and is essential for both orientation and refresher training in a classroom atmosphere for both state and Federal inspectors.

FRA believes that on-the-job training can also be very helpful to new state inspectors. In the past, the quality of such training has been hampered by the limited guidance that FRA inspectors have been given. A manual to assist FRA inspectors in on-the-job training is now nearing completion and should be ready for distribution in the Spring of 1980.

FRA will supplement this on-going on-the-job training effort with a new training program. Under this plan, FRA will select special instructors from our force of field inspectors for on-the-job training of new state personnel. These instructors will be selected based on both their technical expertise and their teaching ability. Each FRA instructor will have the primary responsibility for the on-the-job training of several state trainees.

FRA agrees that some acceleration of the period required to qualify state inspector trainees as full inspectors is possible with respect to individual state trainees. FRA will work closely with the states to ensure that the rapid qualification of such individuals is realized.

Monitoring

FRA is responsible for assuring that the state programs are well directed. This is accomplished by reviewing the semi-annual reports of the states concerning their inspection activities and by making other investigations or reviews that are deemed appropriate.

The Office of Safety will soon issue uniform monitoring procedures to the FRA regional offices. Each region will follow these guidelines in monitoring the states and in preparing periodic reports of its findings.

Coordination with Regional Activities

FRA must review the planned inspection schedule of state authorities to ensure that there is not unnecessary duplication. At the same time, FRA has an obligation to inform the states of its inspection plans, so that the states can see how their activities fit in with the overall Federal effort.

Individual state inspectors can also be brought into accident investigations. Complete state responsibility for accident investigations is not possible at this time, since a broad multidisciplinary capability is normally required. However, there is no reason why a state track inspector, for instance, could not provide his expertise as part of an FRA accident investigation team. One region has already found this approach helpful.

Management of the National Inspection Program

FRA must make the state inspection forces a well integrated part of its inspection effort. All relevant communications from FRA headquarters to our regional offices will also be sent to the appropriate state authorities. State inspectors will be encouraged to attend FRA regional track and equipment safety conferences. Orientation and training sessions are being planned for 1980 to present the forthcoming changes in track and equipment regulations; both FRA and state inspectors will attend these sessions.

FRA has transferred program management of the State Participation Program from the Office of Federal Assistance to the Office of Safety. This has streamlined the flow of information to the states and clarified program direction. As part of the reorganization, FRA is bringing together in one office the safety related programs involving state participation, rail/highway grade crossings and training. This will improve program management by strengthening the ties between the Headquarters office, the states, and the FRA regions.

State Role in Promoting State Participation Program

The states are responsible for promoting and administering the State Participation Program through: 1) reports to FRA, 2) training, 3) coordination with regions, 4) cooperation with FRA special assessments, and 5) advice to FRA.

Reports to FRA

State inspector supervisors submit to the FRA Regional Directors their own Planned Inspection Activities - Monthly Work Schedule Report. FRA uses these reports in conjuncton with accident data and data from automated track inspection vehicle surveys to plan a coordinated inspection effort. Duplication of inspections by Federal and state inspectors is thereby minimized.

In addition to the Planned Inspection Activities, the states supply semi-annual reports which describe the inspection activities during that period and provide a detailed breakdown of expenses.

Training

FRA encourages states having Federally certified inspectors already on board to play a major role in the training of state trainees.

The states should permit their trainees to cross state lines in the course of an investigation. FRA realizes that the vast majority of a trainee's time should be spent in his (her) state. However, there are a number of states that have imposed a blanket restriction on such out-of-state training and this has, in some cases, reduced the effectiveness of the on-the-job training by Federal inspectors.

Coordination with Regions

Most states are doing their part in informing the regions of their activities through their Planned Inspection Activities reports.

Cooperation with FRA in Special Assessments

During 1979, FRA made special assessments of two carriers. The assessments involved a comprehensive examination of all facets of the railroads' operations. State inspectors were a significant help to the FRA in taking over routine inspections while FRA conducted the special assessment. In the future, FRA believes that the state inspectors can play a role in the special assessments as well.

Advice to FRA

FRA has not taken full advantage of the rapidly developing expertise of state inspectors. This expertise can be of help to us in shaping policy and providing input to revisions of track and equipment regulations. FRA plans to solicit state views on such projects in the same way that the views of our field staff are sought.

Level of Participation

There are currently 30 states with a total (including trainees) of 55 track and 29 equipment inspectors participating in the program.1/ Two years ago, there were only 19 states with a total of 27 track and 12 equipment inspectors in the program. We are optimistic that as many as 10 more states will join the program in 1980 and that the total number of state inspectors and trainees will increase to 180.

1/ A complete listing of states currently in the program is shown in Appendix II.

Conclusion

The Federal and state inspection efforts must be well integrated. This can only be done if there is a clear understanding of the respective roles of the two inspection forces. FRA must demonstrate its commitment to the program by seeking to put the state inspection forces in the mainstream of the overall inspection effort. At the same time, the states must recognize the need for a coordinated national effort. If these objective can be realized, continued advances in the effectiveness of the State Participation Program are assured.

Appendix I

Duties of Railroad Safety Inspector

1. Correctly and uniformly apply Federal Standards.

2. Provide instruction to carrier personnel in the requirements of law and regulation and the preparatory steps required to achieve compliance.

3. Display a level of technical competence equal to that of carrier supervisors with whom the inspector works.

4. Conduct thorough accident investigations utilizing extensive background knowledge of railroad equipment, facilities and operations to identify fruitful avenues of inquiry.

5. Effectively communicate by written memoranda the circumstances and significance of alleged violations, setting forth evidence supporting each element of the civil offense.

6. Acquire technical data related to developing problems which may be the subject of future regulation.

7. Evaluate waiver petitions and other requests for special approvals.

8. Investigate complaints and seek remedial action in areas where regulations do not exist.

9. Identify and evaluate serious conditions which may warrant the removal of track or equipment from service.

Appendix II

STATE PARTICIPATION

State	Inspectors	
	Track	Equipment
Alabama	2	2
Arizona	2(1*)	2
Connecticut	1*	
Florida	2	2
Illinois	3	
Indiana	1	
Iowa	3	
Kansas	1	
Kentucky	1	
Louisiana	1*	
Maryland	1	1
Massachusetts		1
Michigan	5	1
Minnesota	2	
Missouri	3	
Nebraska	1	1
Nevada	1*	
New Hampshire	1*	
New Jersey	3*	
New York	3	4
North Carolina	1*	1*
Ohio	3(2*)	2(1*)
Oregon	2	2
Pennsylvania	3	3
Rhode Island	1*	1
South Carolina		1
Utah	1*	1*
Vermont	2	
Washington	2	2
West Virginia	3*	2
TOTAL (30 States)	55	29

*Denotes Trainee

Mr. PARSONS. Mr. Chairman, members of the committee, it is my pleasure to give you a short summary of the study directed by the Congress November 2, 1978. This first chart—and I don't want to read it all—it is at the bottom.

We were asked to determine the relationship of size, weight, and length of cars, whether that has an impact on the safety and efficiency of the system.

The approach used in this study is similar to that used in most of our research in the agency, that being of a cooperative nature. We used all known sources of data and involved both rail management and rail labor in the conduct of the study.

For example, we used the FRA accident file, the AAR universal machine language equipment register, the 1 percent waybill sample, additional ICC data and in the earlier research we relied heavily on our past and current tank car research.

The work we did on Amtrak's locomotive problems, the SPD–40 and the E–60 and our track train dynamics. Probably a highlight of the study was the involvement of many railroad employees. Under the leadership of the UTU, about 1,000 employees were surveyed and took the time and submitted very detailed questionnaires, 16 detailed questions. I personally reviewed quite a few of these and I'm very impressed with the willingness and anxiousness of these employees to try to contribute to the safety of the industry.

In addition, through the AAR, major railroads were surveyed and were asked questions with regard to increasing or decreasing loads and other questions pertaining to this study.

From this approach and all of this data we were able to melt it down and come in with the consensus that results in 11 major findings. The report is available to you and I do not want you to strain your eyes on this small chart. I would like to highlight about five or six.

The first finding is that the size, weight, and length of cars, particularly in the hazardous material, have been increasing with time. I have two backup charts to illustrate this. The first is just a trend of the capacity, the carrying capacity of the car with time. The line pointed to is in 1960 and you can note that is when the heavier cars started coming into the industry about the same time we had this growth in hazardous material traffic.

So the two together play in this study, and it was about 1969 that we had our first major accident involving this type of situation, and the major research and the recent rule to try to get on top of this.

The next point I would like to make is that profitable railroads have been able to offset the effects of heavier axle loads and still maintain safety. This chart is a relative ranking, if you will, the lowest number of accidents being pegged as 1 and the highest number here at 15, which represents 6 railroads. As you would suspect, and the data supports, the ones with the better safety records are the ones in better financial health.

So there is a direct correlation, as you so point out in your statement, sir.

Another finding of the report was that we were not able to relate or correlate fatalities to car size, car weight. The other finding in that area is that fatalities are low, have been low and they are

random. In the same study, though, when we look at the injury picture it wasn't so much a function of the weight of the car but the configuration of the car. If the car were low and there were not good places to grab the car, there seemed to be a correlation between the particular physical characteristics of the car and personnel injuries.

The most amount of effort we put into the study and the most difficult job for us, because the data had never been massaged in this depth before, was to try to relate the size of the car to derailments, and on a volume basis I have a chart showing that there really isn't much difference.

We have about five other parameters in the report. If you vary different parameters you can change the order of the cars. But in the big picture, it is a wash. We cannot correlate the weight of the vehicle to accidents per se, although the weight of the vehicle does lead to maintenance cost, and without the improvement on the track it would eventually show up.

We did identify, as the Administrator indicated, three bad actor cars out of all of this. As we looked at all of the data and tried to correlate car type by the fleet average, there were three types of vehicles which were involved in more accidents than we believed were their fair share. Those were the covered hopper, the general flat, and the auto flat.

A concern, and not an immediate one because the study to date does not support a problem in this, but a concern for the future is the continued growth of car size, along with the growth in the hazardous material market and the marginal railroad situation.

I have a chart that illustrates it. It is exaggerated by the artist but the point of the chart, the red line indicates those railroads which have not been able to stay on top of track maintenance. It was pointed out in our prospectus for change study that this was in the order of $13 to $16 billion.

The adminstration's bill before this committee is aimed at trying to pump more money into these marginal railroads to get that situation up.

The blue line is based upon several sources on the potential growth in the hazardous material area, and the concern here is primarily one of interchange because by and large the healthy railroads have the better equipment. It's when this equipment interchanges with a poor road that hasn't kept its track up to date that we have some future concern.

I don't want to leave the committee high and dry with these concerns. The report goes into possible solutions, the first being stop the crucial deterioration of the network. That is the purpose of most of us being here today, and in the future on our other act, to revitalize and restructure this railroad. We should concentrate on the bad actor cars.

The Administrator has indicated he intends to appoint a committee. We have both AAR and labor agreeing to serve on such a committee to look at these three cars and other aspects of the study and come up with positive, cost-effective solutions.

Third, at present the study finds there is a lack of incentive for railroads to put improvements on vehicles if they are extensively interchanged. The benefits do not accrue to the original owner, and

it is just an issue. We don't have a specific solution there, but it appeared to those researchers doing the study that there ought to be incentive to put better safety equipment on the cars.

Last, maintain size restriction. In this area I can report good news.

In our two largest research and development programs we have changed directions within the last several years and we are aiming at cars that could carry the larger volumes, 100-ton cars, but would act from the track viewpoint as if they were 80 or 70 tons. This is through better damping and better tracks underneath these cars.

The last item I indicated was that we do intend to convene a committee. This committee will not only look at the devices you can put on the cars to make them better dynamically, but also the operational and maintenance aspect, and I have one particular chart to show you some of the tools available to the committee.

This is a chart basically that depicts the performance of a snubber, which is comparable to a shock absorber on your automobile. The blue curve would be how a car would perform without the shock absorbers, if you will, and we are measuring basically the degree the car could roll back and forth.

By the provision of snubbers to the car you can damp that out and cut the rock and roll by a factor of two to three.

As you can see on the chart, there are other trends like this which would be made available to the task force which is to report on the committee.

Again, I would like to thank the committee for the opportunity to present this and publicly thank Jim Sneider and Bill Johnson. We couldn't have done this without both labor and management's help.

Thank you, sir.

Mr. FLORIO. Thank you very much.

Mr. Matsui?

Mr. MATSUI. Thank you, Mr. Chairman.

Mr. Sullivan, you would recommend moving the R. & D. aspect of safety to DOT. Of what significance is that?

Mr. SULLIVAN. Perhaps Mr. Parsons would comment.

Mr. MATSUI. Is it a bookkeeping situation?

Mr. PARSONS. It is a bookkeeping situation.

Mr. MATSUI. The last question I have deals with the correlation between the profit margin of a railroad and the accident rate. Now obviously the long-term solutions will be to encourage and help the railroads in terms of the profit margin, but assuming that that is still a ways off yet—when I say a ways off, a few years at least and more than that at most—what specific methodology are you using in order to hone in on these now that you do have a specific——

Mr. SULLIVAN. I don't think that we have a methodology that is very specific, Mr. Matsui. I think what we are seeing and the results of this study show what we have been saying all along, and that is if a railroad is generating cash through net earnings and depreciation, it will have the funds to do the track work and other work that is necessary.

So I think the real initiative, as the chairman has I think recognized with his legislative initiative, the real initiative on our part has been to free up the regulatory atmosphere for the railroads,

and that is the fundamental thing that will get at generating the right amount of cash.

Mr. MATSUI. That's a little bit like saying poor people commit crimes and rich people have a tendency not to, so we ought to make everyone rich, so I agree with that.

Mr. SULLIVAN. If I may, Mr. Matsui, a railroad, rich or poor, must generate the cash to pay the people to do the work to fix the track.

Mr. MATSUI. But your statistics show that railroads not having a good profit margin have greater accidents than those who do.

Mr. MATSUI. Are you honing in on these railroads that cause more accidents? Are you looking at them with more particularity?

Mr. SULLIVAN. Recognizing their problem, we have said over and over again that we will not compromise safety because of their financial problems, and I think our enforcement, our fines and enforcement show that we are strictly enforcing our regulations so that their financial problems we feel sorry about and we are trying to address those through deregulation.

Mr. MATSUI. I do, too. I think all of us are sympathetic with that and want to see a healthy railroad, but at the same time, what are you doing? Are you looking at those railroads which for example have a lower profit margin, with a few more inspectors, for example, to anticipate possible accidents?

Mr. SULLIVAN. Not very specifically other than where the title V funds have been available——

Mr. MATSUI. Do you think it would be helpful to prevent accidents if you put a few more inspectors in these railroads?

Mr. SULLIVAN. No, I don't.

Mr. MATSUI. Why not?

Mr. SULLIVAN. I don't think more inspectors would give that railroad the dollars to do the work. That's the thing. They have inspectors of their own. What they lack is the cash to pay the work force to do the necessary work.

Mr. FLORIO. Would the gentleman yield on this point?

Mr. MATSUI. Yes.

Mr. FLORIO. To perhaps come at the problem from a different way but to sympathize with the general thrust of Mr. Matsui's concerns, I have had occasion to be out on the tracks with a particular marginal railroad and had one of the inspectors, internal inspectors, and when you talk about more internal rail inspections I assume that means inspections by the railroads themselves. Is that correct?

Mr. SULLIVAN. Yes.

Mr. FLORIO. One of the things I have had conveyed to me is whenever there is an opportunity to call things appropriately but there is some discretion, we should call on the side of letting the train go through a little faster because that increases our economic profitability and that will generate the revenues necessary to make the improvements, as you have alluded to and I have alluded to.

But at the same time, the tradeoff with regard to the safety factor is that rather than in this one instance, which was a Federal inspector saying 10 miles and our other railroad inspector saying 40 miles per hour allegedly, this being just a question of interpreting the regulations, the internal inspector certainly in the perform-

ance of his job is going to say we should go faster for the health of the railroad, and he can carry it to its extension and say that is good for safety.

But I wonder if there isn't some internal conflict in relying, particularly in these marginal railroad situations, on internal inspection to a large degree because the interest is not slow orders, where slow orders may be important. The major interest is to speed up the railroads so as to be able to generate this revenue.

And I think this is a point Mr. Matsui is making. Perhaps there is not a need to tilt the Federal effort toward those railroads that are not doing as well as they could be because they have more of an interest and more of an incentive to perhaps look the other way a bit more because they are not as productive as they could be.

Mr. SULLIVAN. I think in the cases I have described we have ended up doing that. In the case of the L. & N., due to their unfortunate accident experience, we literally saturated their property with our inspectors, taking them away from other parts of the country, and we issued an emergency order that drastically reduced their overall speeds of operation where it entailed the handling of hazardous materials.

We also demanded walking inspections of their full system because we felt it was necessary. But with that, we had a lot of controversy. They didn't like this. I must say, however, their parent corporation came through with the dollars necessary to do the work, and that company came through with the effort that produced in my mind a very dramatic result of cutting their accident rate almost in half.

That falls in line with what you were saying about methodology. I think we were reacting to an emergency situation more than having a methodology that we tie into a profitability formula.

Mr. MATSUI. Right. Well, apparently that method you used in that situation was very productive. That is why I'm asking you about methodology.

Now you have these statistics and this conclusion and I wonder whether or not you and your staff are trying to come up with a methodology to attack this problem.

Mr. SULLIVAN. I would ask Mr. Walsh to respond to that.

Mr. MATSUI. Can you tell us what that methodology is?

Mr. WALSH. What we have done in the year that I have been in the Office of Safety, we first took a look at the L. & N.'s record and the emergency order No. 11 was out at that time. At that time I redirected all of the Federal inspectors in all disciplines—track, hazardous material, operating practice, signal and train control—to go on that property and to just make a complete assessment of what we felt were violations of Federal standards and where things were lacking.

Now all the inspectors are trained railroad people with expertise in their field. From that we found we worked very close with L. & N. management and had excellent cooperation from them. We found areas where we felt they were lacking. Some of them were in the train-handling area. L. & N. went out and bought the necessary equipment on all of their divisions to retrain their employees and at the present time they are retraining their engineers.

As a result of that experience we went on the Rock Island Railroad, which we took from our reporting analysis, the worst railroads, and starting working from the bottom up.

At the time we completed our assessment of the Rock Island Railroad, there was a strike on the property. As a result of the information that we had, it was used on the ICC and Department of Justice, the corrective service order.

Toward the end of last year we went on to the Illinois Central Gulf and made an assessment of that railroad and worked with that management, and I believe we will be as successful with the Illinois Central as we were with the L. & N.

This year we are taking another look at how we can redirect our forces to continue this program and yet not have it impact on our overall inspection requirements. But this is what we have done last year and this is what I intend to do this year.

Mr. MATSUI. So as a matter of policy in FRA, you are addressing this problem by looking at those railroads that have profitability margins less than others, for example. Is that a correct statement?

Mr. SULLIVAN. If I may, Mr. Matsui, it is not just because they have a profitability problem. That is reflected in the condition of their plant.

Mr. MATSUI. I know, but what good are these statistics unless you are going to act on them?

Mr. SULLIVAN. Which statistics?

Mr. MATSUI. The ones you just gave us about the correlation between profit and safety. Obviously you did that for some reason.

Mr. SULLIVAN. I guess that's part of the message we had been trying to take to the public.

Mr. MATSUI. I understand that and I'm glad you did it because it is important, but at the same time what are you going to do with it besides advocate deregulation, and that is an issue which may or may not have a major effect on profitability? We don't know. You may kill railroads as a result of that or you may promote them. I don't know. That's something you have to determine.

So what are you going to do with these statistics?

Mr. SULLIVAN. I would presume that those railroads, and if I may say that includes all of them who are not able to generate sufficient cash to keep up with their maintenance requirements, would draw our attention. But I guess what I'm saying is there seems to be a delay. You can take a perfect track structure and say UP, Southern or whoever, and give it 3 years of no maintenance and they would be in trouble, and that would start to draw our attention.

Mr. MATSUI. Mr. Sullivan, let me say this. I don't want to go on because I think we both know where we are on this thing, but I would have a difficult time voting in favor of any authorization if in fact you would prepare these studies and not act upon them. I think this is a significant study. We are talking about safety, the obvious purpose of this hearing.

Unless I can see some methodology developing out of this soon, I don't know how I could vote for this authorization. So I'm just going to leave it at that, Mr. Chairman, and I will yield that.

Mr. SULLIVAN. Thank you, sir.

Mr. FLORIO. You have touched upon a couple of points I would develop. One specifically is the reference you made to the L. & N. emergency order, I think you called it. Wasn't there some question as to DOD's authority to issue that emergency order?

Mr. SULLIVAN. Yes, it was challenged, Mr.Chairman. Mr. James can give you the complete story on that.

Mr. FLORIO. It was in the courts, I assume?

Mr. JAMES. Yes, Mr. Chairman. The order was issued early in February of 1979 and there were six judicial decisions involved before the termination of the order by judicial decree, and we had one administrative hearing. So we had a lot of challenges.

Mr. FLORIO. What was the ultimate determination?

Mr. JAMES. The ultimate determination, 4½ months after the order was issued, was that the FRA exceeded its statutory authority.

Mr. FLORIO. Will there be recommendations from your agency to modify your authority so that in the event of a situation comparable to this your authority would be sustained in court?

Mr. JAMES. One of the provisions in the administration's Safety Authorization bill would clarify our emergency power authority to overcome some of the deficiencies perceived by the court in the issuance of the L. & N. emergency order.

Mr. FLORIO. Thank you. I just ask your thoughts—you were bragging, and perhaps justifiably so, about the civil penalties you have received. Suggestions have been made those penalties would be put to better use, rather than putting them into the general Treasury, put them into some sort of a safety trust fund. Do you have any thoughts on that proposal?

Mr. SULLIVAN. We don't support that, Mr. Chairman. Would you like to expand on that, Mr. James?

Mr. JAMES. I think the objective of the fines is to make railroad management, particularly top management, feel very uncomfortable about the conditions which led to the fines. So we would be somewhat concerned if the whole process turned out to be a way of raising money for reuse by the railroads. We know they need the money, at least many of the railroads, but the process is one of unpleasantness, of bringing to top management a concern with the condition of the railroad and the practices of their subordinates.

Mr. FLORIO. The deterrent value of the fine would in no way be diminished if in fact there was a trust fund. I'm not advocating this, just exploring this. Your trust fund would not be turned over to the railroads but would be made available at the Government's authority for purposes of utilizing those moneys for rail inspectors or whatever else you think is needed in a safety-related way.

I don't think anyone is advocating turning the money back to the railroads.

Mr. JAMES. The amounts are still relatively small compared to the total amounts available for financial assistance and other expenses, so I don't think it would make much of an impact.

Mr. FLORIO. I am interested in the State inspection programs. It was brought to my attention that States can go to court if FRA has not undertaken enforcement action within 90 days on alleged deficiencies. I'm interested in why the 90-day lag, inasmuch as I assume we are talking about only those States which have been

thoroughly certified by you as being competent to handle inspections in lieu of the Federal inspection system.

If in fact they are fully certified, why do we have to have the delay? And if there is a reason for the delay, that you have some questions about the ability of the State level, why would they be fully certified to be out doing the things you should be doing in terms of track inspection systems?

Mr. JAMES. The 90-day period is a statutory period contained in the 1970 Safety Act, after which time if a violation has not been processed by my office the State may bring suit independently.

Mr. FLORIO. Am I correct in saying this applies only to those States who have a fully certified inspection system and so take over the responsibilities you take over in those other States that did not have such inspection systems?

Mr. JAMES. There are 30 States right now that have certified inspection systems.

Mr. FLORIO. Fully certified inspection systems?

Mr. JAMES. Well, certified enough to send in violations to FRA.

Mr. FLORIO. So if in fact the State is certified only to the point of having a track inspection system to be certified, as opposed to other aspects of safety, that State with that partially certified system would be able to go into court after 30 days on safety violations in a yard that had nothing to do with the track deficiencies?

Mr. JAMES. No, they could only write violations in the area in which they are certified.

Mr. FLORIO. How many States are fully certified to take over the total safety program for which you have the responsibility of administering?

Mr. JAMES. I don't know the exact number of fully certified States. There are 30 in the program.

Mr. FLORIO. I assume someone knows the number?

Mr. WALSH. Yes, there are 30 States in the program now. In track and equipment there are 29 equipment inspectors out there and 55 track inspectors from State programs. These people can issue violations where they find a railroad in violation of any of our standards.

Mr. FLORIO. I'm still not clear because it's my understanding there are a smaller number of States, perhaps as few as six or nine——

Mr. WALSH. Of the 30, Mr. Chairman, there is a difference in certification in the agreements, but really those 30 States, their inspectors have the authority to issue violations in any of the railroads in the State.

Mr. FLORIO. In any aspect under the safety regulations with which you are charged with enforcing?

Mr. WALSH. No, only in track or equipment. Those are the only two areas where the States are participating in the program.

Mr. FLORIO. So what you are saying is a fully certified State program, fully certified would entail just those two sections?

Mr. WALSH. Just those two disciplines, Mr. Chairman.

Mr. FLORIO. All right. Your responsibilities, then, go beyond those two areas?

Mr. WALSH. Yes.

Mr. FLORIO. So it's fair to say there is no State right now that really is able to do what you are able to do?

Mr. WALSH. That's entirely right, Mr.Chairman.

Mr. FLORIO. Is there any statutory authority for a State taking over the full responsibilities of DOT inspection systems?

Mr. WALSH. There is nothing at the present time, Mr. Chairman, for the State to take it over. Basically, the 1970 Safety Act gave the Federal Railroad Administration authority to go into other areas. The existing legislation, such as the Signal Inspection Act, Locomotive Act, were not transferred over to the 1970 act. So therefore any of those existent prior to the 1970 Safety Act remain in effect, and the States do not have the authority to go in in that area and inspect or file violations.

Mr. FLORIO. I think some of the States are confused in this whole area.

Mr. WALSH. There's no doubt about it, Mr.Chairman. Mr. Sullivan recently took a look at the problems in this area. He transferred the responsibility which was fractured within the FRA to the Office of Safety. We have taken a very, very close look at it. We have gone out and at the present time we are interviewing the States. We have looked in our own shop where there are problems within the Office of Safety, and I think within the next few months I would be really on top and able to address all of the problems and track most of them.

Mr. Sullivan has stated, after we have taken a very close look at it, and have resolved all of the problems or as many as we can, then we will be ready to come back to your committee and make recommendations or whatever we find and whatever we feel is necessary.

Mr. FLORIO. Assuming, notwithstanding the spending analysis, you have made some sort of decision because you are reducing the authorization for the State inspection program down from $3.5 to $2 million. That indicates to me that you are moving in the direction of less reliance upon the system than you have had in the past.

Is that a fair conclusion?

Mr. WALSH. Not quite, Mr. Chairman. I believe a decision was made that the amount of money, in that we have presently 84 State inspectors on in 30 States, that leaves 18 States to go and there is carryover in there sufficient to carry us through the next 2 years while we see—they have an obligation and responsibility to go out and try to bring the other 18 States on board and get them into the program.

We are seeing at the present time that some of the States, one of the States in our area, New York, is losing some of their inspectors due to low salaries.

Mr. FLORIO. How can they be losing inspectors at low salaries when I think you're telling me we had left over money?

Mr. WALSH. We only pay 50 percent, and even with our 50 percent, they have through their own State requirements that they can only pay I believe $16,000, and most of the trained railroad employees that we usually draw on to fill both Federal and State inspector positions are making more than that. So they have a recruiting problem.

Mr. FLORIO. If you have extra money it seems to me more cost effective to do this at the State level, assuming we have qualified people. Shouldn't you be asking for statutory changes to increase the proportion of the ratio so that you can use some of that money on a 75/25 basis or however?

Mr. WALSH. That has been called to my attention. The biggest thing that has come to my attention, Mr. Chairman, is this is supposed to be a State partnership, a 50/50. This was basically the intent when the program was set up. Until I explore all of the problems that are out there and get an honest handle on it, I just don't think I could make any recommendations.

Mr. FLORIO. I certainly wouldn't want to put you in the position of making premature judgments, but the purpose was not per se to have a 50/50 partnership. The purpose was to extend the ability to have inspections take place. The decision was made that the States might be the appropriate mechanism to increase the capability of the Federal Government through this partnership. So there's nothing sacred about a 50/50 breakdown.

If in fact the Federal revenues are not being utilized such that you are coming in to ask for a reduction, and we can perceive a problem inhibiting the States from expanding from capability, it may well be deserving of your consideration and our consideration that we modify the system to a certain extent to expand the ability to have more inspectors. Because every year that I have been here we're all lamenting the fact that we don't have enough inspectors at the Federal level and certainly not at the State level.

I would really appreciate some suggestions after you conclude your analysis, and hopefully it can be concluded before very long, as to how we can provide more inspectors, and if they have to be at the State level that's fine, we'll do it at the State level, assuming they all meet minimum qualifying standards.

If I could go into one or two other areas, the tank car question, the fact is as we understand it, the regulations are going forth on 112, 114 tank car retrofit program. The suggestions were made that we have comparable problems with the 105 type tank cars.

Can I ask why the regulations were not put forward at the same time for all three types of tank cars since they carry essentially the same types of materials? Is there a justification for not treating all three cars the same?

Mr. SULLIVAN. Mr. Chairman, when this administration came into office the regulation was ready to go for the 112 and 114 cars, and we went with that as something in being. We later, at the suggestion of NTSB and the committee, accelerated that program, but at that time a similar amount of work had not been done on the 105 cars and I believe that is why it trailed along. Mr. Walsh can tell you where we are on that right now.

Mr. WALSH. First of all, Mr. Chairman, it was my understanding with the 112 and the 114 tank car were bad actors. Therefore, the emphasis was put on retrofitting those cars.

Mr. FLORIO. In the sense of the volume of the material or something structural?

Mr. WALSH. The volume of the material, the release and that. It was determined those cars should be the cars that needed the

immediate attention: shelf couplers, headshields and a thermal insulation.

It was also determined that we could not have a shortage of cars, so we would emphasize our biggest area on those cars in the retrofit. That is presently at this time just about complete or it is ahead of schedule.

Of course, we were looking at the suppliers having the material for the shelf coupler and the headshield available, the railroad's ability to install this and still not have a shortage of tank cars.

Mr. FLORIO. Isn't it true that most of these are not railroad-owned cars?

Mr. WALSH. That is true, Mr. Chairman, the large majority.

Mr. FLORIO. So we're not talking about the financial health of the railroads being overly impacted. Many of these people are oil and chemical companies.

Mr. WALSH. Chemical companies own the cars.

Mr. FLORIO. My recollection is the industry is not having that much difficulty in terms of its own financial picture.

Mr. WALSH. It does not create a difficulty for the industry in that area except for the availability of people to do the work, and also the material being available and also the shortage of cars. These are three things which had been taken into consideration at the time of the retrofit.

Mr. PARSONS. Sir, there is a technical difference. At the time we did all the research and had the rule HM-144 on the 112's, you will recall that family of vehicle was 30,000-gallon-vehicles without insulation, basically the same design throughout.

So the retrofit that came out could fit the entire fleet. On the other hand, the 105's are a mixed bag. They go from 10,000 gallons up to over 22,000 gallons. They do have insulation but there are four different types. They are structural—they are jacketed but their structural design and physical strength vary. The jacketing is not consistent.

So there is a study under way right now to find out what the mix is out there and what makes sense. The same rule we put on the HM-144 would not necessarily fit this particular batch of vehicles.

Mr. FLORIO. When can we foresee the rulemaking process being expanded to these other types of cars?

Mr. PARSONS. I can speak of when the research would have to be finished. Mr. Sullivan would have to speak to rulemaking. Later this year we should be in a position to prescribe to the Administrator, Mr. Santman, as to the mix of vehicles and actions that could effectively be taken.

Mr. FLORIO. Mr. Santman, is there something you would want to add to that?

Mr. SANTMAN. I am prepared to move when the technical advice coming out of the FRA studies is ripe for moving.

Mr. FLORIO. Let me ask you a question. We have had industry representatives, ironically enough, complain that the Materials Transportation Bureau has proposed standards for intermodal tank cars which are not strong enough. Have you received similar complaints?

Mr. SANTMAN. As part of the rulemaking process, and indeed I believe this is an indication that the rulemaking process is working

for a change, as compared to the past when such things as the jumbo tank car standards came into being 25 years ago, I believe our proposal has drawn from a number of the railroads some serious questions. We have considered them in the rulemaking.

This indeed is an ongoing rulemaking where the comment period is closed. Basically what we are talking about here is [indicating] I think this model will give you an indication. It is the liquid counterpart of the dry cargo container handled on container ships and piggybacked on trucks and will move by rail. The development of this particular mode of transit has been largely outside the United States.

Again, unfortunately it is one of those technological areas where the Japanese and Europeans seem to have gotten a jump on us. It has been in use for about 10 years, and I believe the comments that have been offered by the AAR in our rulemaking in some part were quite sympathetic to them in terms of relief devices, that once they open, if there is an overturn, I think they're concerned about structural integrity.

There is also a heavy indication we are approaching the matter of bulk shipment of hazardous materials by rail in a much happier manner than we have in the past. When I say "we", I'm talking about shippers, carriers, and the Federal Government.

Mr. FLORIO. There are no legal prohibitions are there, for requiring drastic retrofitting if in fact it doesn't meet your standards?

Mr. SANTMAN. Indeed, we have a much better handle under the 1975 act on container manufacturing than we ever had before. The law that preceded the 1975 act required us to work through the legal fiction of telling shippers and carriers what they could and could not do.

Mr. FLORIO. That is perspectively. How about equipment on the tracks right now that does not comply with what you perceive to be minimum standards?

Mr. SANTMAN. What we are talking about here is not railcars with undercarriages built outside the country. We are speaking of a portable tank, which I think you can envision, enlarged to a 40-foot length, piggybacked on a trailer. The manufacturer of these, the arrival of these on the scene, has occurred in the United States under our exemption process, and we have indeed required each manufacturer, foreign manufacturer, through their designated U.S. agent, to participate in a public proceeding for the approval of the process by which they manufacture them.

What we are talking about right now is moving that into a generic rulemaking, an across-the-board set of standards for all intermodal tanks. The 10 years or so of experience which has been largely outside the United States and on vessels moving back and forth between the United States and truck movement——

Mr. MATSUI. You use the word "exemption". It sounds like this is a voluntary program.

Mr. SANTMAN. No, exemption is the name that has been associated because it's used in the statute we operate under as the heading for granting administrative relief from the regulations. The regulations in some cases will say you may not do something and in other cases they may be absolutely silent.

This is an area where the regulations were silent with respect to the concept of liquid containers of this particular size. The regulations had grown up over the years largely in a reflection of what the marketplace was developing. But the AAR-RPI tank car committee had advanced forward in the movement of the state of the art with respect to large tank cars. That's how the jumbo tank cars came into being.

This type of tank [indicating] and the concepts associated with them and the techniques for fabrication have grown up in a slightly different atmosphere. They have grown up in this kind of an arrangement where largely the U.S. shippers who were interested in gaining economic advantages of shipping in this amount of bulk rather than 55-gallon drums and smaller containers saw the attractiveness of these portable tanks being used, particularly in the European community, and wanted to get in on the benefits of it.

They came to us, brought the manufacturers, primarily the European manufacturers to us and said look, we would like to be able to use these kinds of containers in the United States. They're being used outside the country. They have shown themselves to be capable of surviving and working well in transportation. They have certain economic advantages.

We went through a public process, including some tests that Conrail assisted us in performing in Baltimore in May of 1979 in the actual rail mode, using these containers. And they are currently authorized for use in this country under this grant of exemption, which is a form of administrative relief from the regulations.

They did not anticipate these kinds of containers. We are now at the stage where we are establishing a frontend rule, a standardized rule for how they will be manufactured, the thickness, the testing of them, and the uses to which they may be put.

I must compliment the AAR for their active participation in that rulemaking, and I think with their help we are going to fashion a good rule which will live well over the years.

Mr. FLORIO. I have just one last question. It's been brought to the committee's attention that there are allegations about a Conrail practice of removing bad order tags or disregarding them and putting the cars back in use when in fact cars have had the need for repairs.

I assume this has been brought to your attention, and we would like to know what if anything your office is doing about looking into the validity of these allegations.

Mr. WALSH. Well, Mr. Chairman, it has been called to the attention of the Office of Safety in the more recent months, and of course the bad order tag is used in the industry not only for violations of the Federal safety standards but also for some of the railroad's own requirements, to get a car to a home shop or they have a problem flooring or some of their own problems.

We recently revised our freight car safety standards to become effective on December 31, 1979, or they were issued on December 31, 1979, to become effective March 1. There seems to be, from our inspectors going out and talking to both labor and management on Conrail, some misunderstanding as to the use of the bad order tag.

We have set up a series of conferences where we will explain to them that this tag is used by the industry. To have a tag of our own we would have to go to OMB and get their permission to make the rebutting requirement. We feel the use of the tag is proper. We have addressed it in our new regulations and changed our regulations so that where there was a vagueness in the old regulation, it has been changed.

So there should be a good understanding as to how a bad order tag would be used in reporting a violation of some of our Federal statutes. I hope that in the next few months we can resolve that so that both Conrail management, Conrail employees, and their union representatives will fully understand exactly what is in the regulation and when the tag is taken off that it is done properly.

Mr. FLORIO. Are you telling me under the present existing regulations that might be issued that the bad order tag device is something that is purely a private internal railroad monitoring device and is not relevant to Federal safety standards?

Mr. WALSH. The tag itself we address in our regulations, Mr. Chairman.

Mr. FLORIO. Existing or proposed regulations?

Mr. WALSH. Existing regulations. Those were implemented on March 1, 1980.

Mr. FLORIO. Prior to March 1, 1980, which was just a couple of days ago, there was no systematic governmentally dictated bad order tag process?

Mr. WALSH. In the old regulations we addressed it but it wasn't what we felt was clear. There was a misunderstanding so we have taken what we thought was the misunderstood portion and emphasized it in the new regulations.

Mr. FLORIO. When you say you addressed it, did you address it in terms of governmental authority or did you address it as being an industry practice you were giving suggestions about?

Mr. WALSH. It is in the new regulations as how the tag will be used.

Mr. FLORIO. But that's not my point. I am talking about the process prior to the first of March. Was there a federally required Federal tag order process?

Mr. WALSH. No, Mr. Chairman, there never was an actual Federal tag. It has always been the industry which has supplied this tag, and they used it to identify Federal defects as well as their own defects. This seems to have been a problem to the employees in completing understanding whether it was a Federal defect or just a railroad——

Mr. FLORIO. So if a railroad did not want to use a bad order tag system for identifying what they perceived to be the defects for the Federal system or their own internal defects, they didn't have to do it. Is that correct?

Mr. WALSH. They had to use some means of identifying those defects and it was a way in our regulation of getting them from where the inspector found the defect to a repair facility to correct the defect. And in some instances I am told the railroad inspector would find a defect and would put a tag on the car and that allowed it to go to the home railroad facilities for repair. This allowed it sometimes to run across country.

So as we are revising our regulations we took this into consideration and we made it so that when these defects were found they would then be tagged and taken to one of the facilities.

The biggest thing is the car could not be placed for loading once it became empty.

Mr. FLORIO. Gentlemen, thank you very much.

Mr. SULLIVAN. Thank you, sir.

Mr. FLORIO. Our next witness is Mr. James B. King, Chairman of the National Transportation Safety Board.

Mr. King, welcome to the committee. Your testimony has been received. It will be entered into the record in its entirety and you may proceed as you see fit.

STATEMENT OF JAMES B. KING, CHAIRMAN, NATIONAL TRANSPORTATION SAFETY BOARD, ACCOMPANIED BY WILLIAM H. GOSSARD, TRANSPORTATION SAFETY SPECIALIST, OFFICE OF EVALUATIONS AND SAFETY OBJECTIVES, AND ELMER GARNER, CHIEF, RAILROAD ACCIDENT DIVISION, BUREAU OF ACCIDENT INVESTIGATION

Mr. KING. Thank you, Mr. Chairman. We are pleased to be here to present testimony on behalf of the National Transportation Safety Board dealing with rail safety and reauthorization of the Federal Railroad Safety Act of 1970.

Before I begin I would like to introduce members of the Safety Board's staff with me today. On my right is Mr. William Gossard, transportation safety specialist, Office of Evaluations and Safety Objectives, and on my left is Mr. Elmer Garner, Chief, Railroad Accident Division, Bureau of Accident Investigation.

The National Transportation Safety Board is an independent agency created by the Congress to investigate major transportation accidents and to issue safety recommendations to prevent a recurrence of similar accidents.

In carrying out this mandate the Safety Board investigates all railroad accidents in which there is a fatality, substantial property damage of at least $150,000 or involves a passenger train with damage of $10,000 or more. In the last year the Board investigated 512 railroad accidents and issued 85 safety recommendations. Thirty-two percent of these were directed to the Federal Railroad Administration.

In addition to its work involving individual accidents, the Board's broader oversight responsibility also makes it concerned with safety trends. In this respect, the Board has been alarmed at the steady growth in the number of railroad accidents over the last 12 years. When the Federal Railroad Administration first reported rail safety statistics in 1967, shortly after the FRA assumed rail safety responsibility from the Interstate Commerce Commission, American railroads registered 7.72 train accidents for every million train-miles. In a little more than a decade, that rate has doubled—in 1978 the rate was 14.99.

There is agreement in both industry and Government on the single most powerful force in this upward surge of train accident rates—that force is deferred maintenance of way. What is lacking is agreement on causes and effective solutions.

Over the years the Board has made a number of safety recommendations to the Federal Railroad Administration on subjects ranging from improving track conditions to establishing special routes for the shipment of hazardous materials.

The response to our recommendations by the FRA has been mixed. While the acceptance rate of NTSB recommendations by the FRA over the last 3 years was 62 percent, the Board feels there are some vital safety areas which are not being addressed in a timely manner. I would like to take a few moments to highlight five of these areas for the subcommittee.

These areas include the installation of shelf couplers on all DOT 105 tank cars which transport chlorine gas and class A and B poisons.

Mr. Chairman, I have heard a number of figures thrown around here and I would like to submit for the record that to put a shelf coupler on to a 105 tank car to protect the public will cost you $202 per car. It will take you 15 minutes if it's a reasonably clean job and 30 minutes if the bolts have to be cut.

So when we are talking let's just put this into proper perspective. And by the way, we are talking 19th century technology.

Mr. FLORIO. Mr. King, let me ask you this. Does everyone agree with your numbers? As you recall, we had a hearing here about 2½ years ago, if I recall, and you threw out some numbers and times that were required to retrofit and FRA came in and the numbers and times were substantially different.

Does everyone agree with your numbers?

Mr. KING. Mr. Chairman. I don't know where anyone else gets their numbers. We got ours from pulling a shelf coupler in front of the world. Admittedly, as I said, it was a clean operation. We later found that many of the rail properties keep a time book, so if you send a team out or a crew out to do some work you can establish times. That is a good management practice, to see how effective people are in doing their work.

The book many of the properties operate with indicates 15 minutes. That indicates a field change. So we are talking about going into the field and doing a field change. You can do it in 15 minutes.

On pricing, everyone talks as if these cars are moving around without couplers, period, and when you pull a coupler it's like a carrot. You pull it out of the ground and discard it, Mr. Chairman. You pull it off and put it on another car. The difference in cost is about $202.

So with the type E, the standard E coupler, we are talking $101 difference per coupler, We are talking about technology which has been known for years and which has been tested and found effective.

The problem we have when we get into this discussion, Mr. Chairman, is the tendency to increase the risk to the public by tripling the size of the tank car, but before we increase the safety we have to spend years in testing. We can move ahead with a larger container and put more people at hazard, but we certainly couldn't put anything on that would provide safety without a long and tedious and methodical study of materials.

Mr. FLORIO. How about the point raised with regard to the coding of the 105 cars? They are not uniform?

Mr. KING. That has nothing to do with couplers.

Mr. FLORIO. The question of the coding. It was suggested this morning that you cannot apply a single approach to these 105's because they apparently fall into four different categories.

Mr. KING. There are different dynamics and we don't question that as to size, but it's interesting to note that we move ahead very briskly to increase the size because of the economics of upsizing in shipment. There everyone seems to agree, and we moved ahead quickly.

I think the question we raise is couldn't someone pay somewhere near as much attention to the safety implications of that enlargement and that shift? Shouldn't that be a part and parcel if you're going to double and triple the size of the container and therefore you are talking about, in the case of chlorine, doubling and tripling your chance of a release. You move from something extremely serious to something potentially catastrophic.

Now you have the question before you, what have you done to enhance keeping the product in the can for whatever reason it might come off the tracks? Then when we hear the folks who have approved the size of the container say gee, Mr. Chairman, we haven't done the thorough kind of investigation that can respond to the public concern about safety, I must admit we get distressed.

I'm sorry, this is a bit extemporaneous, but bear with me, Mr. Chairman. That is No. 1 on our list.

No. 2, the routing of hazardous materials through populous areas. That is obviously linked on that routing. It is built into the track condition that that routing would be done only on good track. Obviously one of the problems profiled is in many studies, Mr. Chairman, which will be submitted, they are talking about if you change the populous areas and rerouted there would be disadvantages. Yet if you put it on Class 1 track there is a greater risk.

What we are talking about is the enhancement of the track also, so they go together and are linked, Mr.Chairman.

Three, adequate grade crossing protection. Four, improved employee training. Five, FRA's track safety and inspection program.

As you know, Mr. Chairman, the Board has had a long-term interest in insuring a safer railroad environment through hazardous materials tank car improvements. The Board waged a long campaign to achieve the installation of headshields and shelf couplers on all DOT 112A/114A jumbo tank cars carrying LPG or anhydrous ammonia. We are pleased to report that as of today, shelf couplers have been applied to all United States and Canadian DOT 112A/114A cars.

The headshield program, though not completed in the time frame requested by the Board, stands at 75.7 percent completion based on DOT's retrofit requirements—13,274 tank cars completed of 17,542. All headshields are to be applied by December 31, 1980.

However, the Board is not satisfied with the response of the FRA in accelerating the issuance of a rulemaking proposal for application of shelf couplers to DOT 105 tank cars which transport chlorine gas and Class A and B poisons, and I might add, Mr. Chairman, LPG in the larger sizes.

The recent evacuation of one-quarter million people in Mississuaga, Ontario, Canada, after a spill involving lethal chlorine gas reinforces our concern.

Based upon our accident investigation history, the Board issued the original recommendation for shelf coupler action on DOT 105 tank cars on November 2, 1978, and a followup safety report was issued September 13, 1979, stating: "Issue promptly a regulation to require that all DOT specification 105 tank cars which transport hazardous materials be equipped with top and bottom shelf couplers by December 25, 1980." To date, the Federal Railroad Administration has taken no action to implement this recommendation.

The second concern of the Board is the absence of a clear policy regarding the rerouting of rail shipments of hazardous materials through populous areas. Nearly 1,700,000 tank cars of hazardous materials moved on our Nation's rails in 1978.

In March 1979, the Safety Board published a special study evaluating the Federal Railroad Administration's hazardous materials and track safety programs. As a result of that evaluation, we recommended that the Federal Railroad Administration, in cooperation with the Interstate Commerce Commission, determine the feasibility of establishing special routes for hazardous materials to bypass dense population centers where possible.

In response to our recommendation, the Federal Railroad Administration has undertaken a study to identify the risks involved in all rail transportation of hazardous materials in the United States. This study, in combination with population density information, should allow assessment of the current and future exposure from such shipments, and the feasibility of minimizing this exposure through routing controls.

The FRA anticipates completion of this study in the near future. In the meantime, we are pleased to note that at least two major hazardous materials shippers—Du Pont and Dow—have initiated steps to determine the safest rail routes for their shipments.

The third area of concern to the Board is grade crossing safety. The Board believes that the FRA must take a stronger leadership role in the area of grade crossing safety. Grade crossing accidents cost the Nation 1,000 lives a year and cause over 4,000 injuries.

Preliminary figures for 1979 show that 62 percent of all rail fatalities are as a result of grade crossing accidents. The Board has undertaken a safety objective that the FRA take immediate steps to enhance train conspicuity to address this problem. Since there are approximately 217,000 public grade crossings in the United States, we believe the FRA should develop safety programs that will enhance the safety level at each and every location.

In addition, the Board believes that FRA should include as a part of its system safety plan detailed actions it will take to reduce fatalities, injuries, and accidents at grade crossing locations. To date FRA has not undertaken a formal program to address this safety area.

The fourth area of concern involves accidents which are triggered by human error. The Board's accident investigations show that human error is an increasing cause of train accidents. These errors are often made due to poor judgment, lack of knowledge or experience, or inattentiveness.

The Safety Board has two concerns with this type of accident: One, the need for improved training for employees and two, effective enforcement with regard to alcohol abuse.

The Safety Board believes that employee errors can be mitigated if the railroad industry provides supervised training based on a uniform understanding and interpretation of rules and regulations. In a recent Board special investigation report we reviewed occupational training in the railroad industry and highlighted our safety recommendation that all Federal and State programs must be reviewed and integrated to provide training programs which insure relevant training for the skilled railroad crafts.

We believe that the FRA should be in a position to examine on a periodic basis the various railroad's training programs to insure that the training qualifies railroad employees to perform their duties safely.

On other area of interest to the Board concerns those employee error accidents involving alcohol or drugs. Recently the Safety Board completed the investigation of two railroad accidents—Thousand Palms, Calif. and Royersford, Pa.—in which the functioning of employees critical to the safe operation of a train were significantly impaired by intoxicants.

The Safety Board now believes that the FRA must establish for train crewmen the same kind of specific no-drinking periods before they go on duty and while on duty, similar to those required by the Federal Aviation Administration for airline pilots. Incapacitation by alcohol of train engineers and conductors operating 10,000-ton trains hauling numerous hazardous materials under difficult roadbed and train handling conditions cannot be tolerated.

Therefore, we are recommending that FRA promulgate Federal requirements that all U.S. railroads write strict prohibitions on the use of intoxicants, and employee's responsibility to report their use, into their rule books, and see that they are enforced.

The last area of concern is the FRA's track inspection and enforcement program. The Board applauds the FRA's efforts to expand its track inspection program given the fact that track defects accounted for 42 percent of all train accidents during 1979.

We understand that the FRA has expanded its inspection to include 52,000 miles of track and has increased the total penalties assessed for violations of safety regulations during fiscal year 1978 to more than double the amount assessed the year before. While the Board supports FRA's increased attention to track defects, we remain concerned that train accidents, particularly those which stem from poor track, continue to increase.

The Board has expressed a particular concern over the Federal inspection program in relation to State inspection programs. The Board issued a special study in 1979 which concluded that the FRA has not implemented an effective State participation program. The Board believes that a properly developed and implemented State participation program would increase the effectiveness of the track inspection program.

While the Board feels that FRA could be making more progress in the five areas we have just enumerated, Mr. Chairman, we do feel that the agency has become more responsive to the Board's recommendations over the past 2 years. Also, we understand that

the FRA is in the process of establishing a safety system plan which will allow it to approach rail safety problems in a more systematic and effective manner.

The Safety Board appreciates the opportunity to share its concerns with you this morning. This concludes our prepared remarks; however, we will be available to answer any questions you may have.

Mr. FLORIO. Thank you very much, Mr. King. I must leave in a few minutes to appear before the Rules Committee and I will ask Mr. Matsui to chair the hearing.

I would like to develop one point. Perhaps I should have raised it also with the officials from DOT, and I would ask them to perhaps respond in writing if they would.

This point, you have been highlighting in a number of different forums, the concern about employee error and this new awareness of the involvement of alcohol and drugs to a degree which perhaps has not been appreciated in the past.

My understanding is railroads have existing regulations and rules, and in fact my understanding is even in collective bargaining regulations there are already prohibitions which would seem to be obvious.

So you are suggesting that the FRA require railroad to have such regulations, and it's perhaps already being done. Do you have any suggestion as to how we can deal with this in a more forceful way if at all possible?

Mr. KING. I don't mean to be presumptuous by asking the committee a question, but I merely would submit a question that may be asked of others testifying today. When someone is found drinking, first, how does the person end up in a locomotive with another crew member intoxicated, second, what happens if that other crew member reports such behavior and finally, how often has that happened?

If someone is found to be intoxicated on the job, what is the procedure? Quite frankly, if you show up as a pilot, a professional airline pilot, under the influence of alcohol, you are in very serious trouble. You are talking about your career being on the line as of that moment. You will not be replaced in 2 months or sent down to fly in the righthand seat. There's a good chance you will never fly again commercially.

Are you prepared to forfeit your ticket and your livelihood so that you can have a beer? The pilots have determined that that is not the level of professionalism they want in their unit. I think that is to the credit of the pilots. They feel they represent professionals. I think that is reflected by the people who operate equipment in this country and I think it reflects a brotherhood.

There's kind of an informal agreement that if someone shows up so badly intoxicated that someone feels forced to report them or they physically can't get aboard their train to perform their tasks, what usually happens with them? What is the usual procedure?

Mr. FLORIO. What is the process in the aviation industry? Is it an internal management process that's required? For example, the 24 hour no drinking, is that Federal law?

Mr. KING. We have had only one accident in 20 years involving alcohol, and that was on a foreign carrier.

Mr. FLORIO. Aviation wise?

Mr. KING. That's correct, in using professional pilots. It's become such a standard of performance that it is not done as far as commercial pilots are concerned.

Mr. FLORIO. I will ask Mr. Matsui if he will take over.

Mr. MATSUI [presiding]. Thank you, Mr. Chairman.

Mr. King, what response did the FRA give you regarding the top and bottom shelf coupler issue? Obviously you raised that with them and they obviously came back with a response.

Mr. KING. They responded favorably. Mr. Gossard, would you speak to it?

Mr. GOSSARD. They responded favorably twice, once from Secretary Adams, a predecessor, and one other time, and both times the response was that rulemaking actions would occur at such and such a date.

Mr. MATSUI. When were these responses made?

Mr. GOSSARD. If you could give me a moment.

Mr. MATSUI. While you are looking, they did not take issue, then, with your original statement in terms of the time and cost allotted to put these couplers on?

Mr. KING. No. Basically we had two replies. Rarely are we told something we are recommending they feel is so outrageous they can't move forward with it. What they generally give us is yes, we agree with you and we will study it. And the study seems to be the cheapest response that anyone can give to anyone in this town. It's just such an easy way. For a few thousand dollars they can stall any action for years while they are busy studying it. I'm not sure what has to be studied. The study that had been done was substantially done. They indicated they would like to do an entire retrofit.

Part of the problem is do you see the attack as piecemeal or as a building block? FRA seems to feel that unless you can cure everything at one time you shouldn't start on anything. We have a different perspective. We have discovered there are links in the safety chain. Each of those links, usually several of them, are in the line to create an accident, and if any one of those links were broken the accident would not occur.

So we said yes, we understand there will be a system, but we would like to attack the identifiable parts of the system which we know have preventative qualities, and this does.

Quite frankly, we appreciate the study and the look they are going to do but we would like a sense of urgency.

Mr. GOSSARD. If I could provide the first letter for the record, the second response we received indicated to us the draft NPRN setting out the shelf couplers would be sent to the Bureau in May 1979. That action has not yet taken place.

Our original recommendation for shelf couplers for DOT 105 tank cars was in 1978.

Mr. MATSUI. I see. Today your statement indicates they have taken no action to implement this recommendation. You have not heard back from them regarding this, I take it?

Mr. KING. They have been very affirmative and very supportive. Our question is when.

Mr. MATSUI. You have indicated also they took no action or formal program regarding grade crossing safety. What would you

suggest in terms of grade crossing safety and what do you think the cost of implementing such a program would be?

Mr. KING. There's a couple of things. One concerns grade crossings that are booby-trap crossings. These crossings are where you have time and distance equations so that an accident is almost inevitable. You stop, you look, and you listen. You don't see anything. You put it in gear and start across the tracks and 5 seconds later you're dead. You've been broadsided by a 90-mile-an-hour train and there was no way of stopping.

By the way, the best thing you could have done would have been to keep it in gear and shoot across the track at 40 miles an hour. You'd be better served.

There are about 2,500 of those types of grade crossings in this country. Those should be looked at immediately. We need to ask, one, should they be closed? Two, should there be a constraint on the speed of the train going into that place if you don't have time and distance?

So I think there are a number of preventive strategies that could be looked at.

Mr. MATSUI. You identified approximately 2,500 of these.

Mr. KING. The FRA started a study at our request. Using technology available to them they identified some of those boobytrap crossings. The question is what strategy and what kind of program do you need.

I thought the questions asked by you, Mr. Chairman, this morning, went to the point. Do you have any kind of program that permits you an organized disciplined management effort that will identify these, set them up in the proper priority and attack them, using a variety of strategies? We haven't seen that, Mr. Chairman.

Mr. MATSUI. You said they have no formal program at all?

Mr. KING. We have not seen it.

Mr. MATSUI. Do we have a line item budget or anything like that from the FRA?

Mr. MATSUI. Could you gentlemen provide me with such a budget? I would like to break down whether you have any money allocated for grade crossing and if you have anything on the coupling issue, and how many staff members are assigned to that particular activity?

Mr. KING. Mr. Chairman, in some cases it suggests the horse and buggy days of counting. When the rail came through town you had five streets in the town, therefore five railroad crossings. Today it might be reexamined, worked with the local community and say possibly two or three of them could be closed and we could protect the others in a better fashion.

Part of that is working with the local community to try deal with what could be a problem. And some of those problems, as I suggested, are readily identifiable and it is a question of willingness to attack it.

Mr. MATSUI. The gentleman who was over here from the FRA when we were speaking of the 105 tank cars brought up an issue that I didn't quite understand but apparently they didn't really relate to tank cars. They were containers.

Can you respond to that and give me some thoughts on that from your office in terms of how do we address that problem?

Mr. KING. To the best of my knowledge we haven't had an accident with these particular containers. We are not familiar with them. Quite frankly I am delighted that MTB, and it was Mr. Santman I believe, that he is looking forward and planning with it in the process. We hope he will act with a similar sense of urgency to deal with what we have right now.

Mr. MATSUI. For the record, the FRA has apparently said that their study shows the routing of hazardous materials around population centers could be counterproductive. Could you comment on that?

Mr. KING. I'm certain whoever said that was somehow interrupted in midparagraph because they would have completed the paragraph to say if the track that you put it on is not upgraded, the assumption is you will put it on your worst track. So if you will take these loads and put them on your worst track you will have a greater incidence.

Mr. MATSUI. Is it generally true from your studies that the tracks around population centers are not as good as the tracks through population centers?

Mr. KING. No, sir. We haven't done that study. But I believe the study FRA is doing indicates what I have just said. I think I have almost given a verbatim quote from it. And I heard that quote given before but it is an incomplete statement. It is true as far as it goes, but the other part of it says if your track is not upgraded and therefore for their model what they do is generate it down to the lowest class of track.

Then they take the model and say what is the accident profile on class 1 track, and then develop the number of incidents or accidents that could occur and that is correct. But if you will upgrade your track and reroute, then the profile becomes significantly better, Mr. Chairman.

Mr. MATSUI. Thank you very much. I would like a copy of the letter for the record from Secretary Adams, and perhaps your letter requesting a response from him.

Mr. KING. We will supply that for the record.

[The following letters were received for the record:]

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
WASHINGTON, D.C. 20590

OFFICE OF
THE ADMINISTRATOR

JAN 15 1979

Honorable James B. King
Chairman
National Transportation Safety Board
800 Independence Avenue, S. W.
Washington, D. C. 20594

Dear Mr. Chairman:

This letter is written in response to your letter dated December 20, 1978, concerning DOT Specification 105 tank cars, particularly ninety-ton chlorine tank cars.

For the record, the tank car that was involved in the Youngstown, Florida, accident which released liquid chlorine was a "jumbo DOT 105 tank car." The term "jumbo" tank car applies to either a gross weight on rail of approximately 263,000 pounds (i.e., a rail load limit of "one-hundred tons"), or to a capacity exceeding 20,000 U. S. gallons, or both. Tank car GATX 50347 was transporting ninety-tons of liquefied chlorine and had a gross weight of almost 263,000. It is the largest (both in terms of weight and volume) liquefied chlorine tank car that is authorized to be shipped.

The Federal Railroad Administration is developing recommendations for up-grading the safety of all DOT Specification 105 tank cars. These recommendations will include:

1. Shelf couplers
2. Tank head protection
3. Better insulation
4. Increased tank shell and head thickness
5. Increased jacket shell thickness

These recommendations will be forwarded to the Materials Transportation Bureau so that they may be issued in a Notice of Proposed Rulemaking in March, 1979.

Sincerely,

John M. Sullivan

JOHN M. SULLIVAN
Administrator

THE SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

MAY 18 1979

Honorable James B. King
Chairman
National Transportation Safety Board
800 Independence Avenue, S.W.
Washington, D.C. 20594

Dear Jim:

Enclosed are our comments to the National Transportation Safety Board's safety recommendation R-78-58 and R-78-59 as outlined in Report Number NTSB-RAR-78-7 "Railroad Accident Report - Derailment of Atlanta and Saint Andrews Bay Railway Company Freight Train, Youngstown, Florida, February 26, 1978."

Sincerely,

Brock Adams

66-493 O—80——5

RECOMMENDATION

Require that top and bottom shelf couplers be installed on all DOT 105 tank cars as soon as possible. (Class I, Urgent Action) (R-78-58).

ANSWER

The Federal Railroad Administration (FRA) agrees that a retrofit program should be required so as to have appropriate Type-E top and bottom shelf couplers and Type-F top shelf couplers installed on all DOT Specification 105 tank cars at an early date. However, the FRA feels that this requirement should be only part of a total effort that would result in DOT Specification 105 tank cars being equipped with steel jacket heads, and all new pressure tank cars having better structural strength, increased puncture resistance and better thermal protection. A Notice of Proposed Rulemaking is being developed covering these safety measures. It is anticipated that a draft of this NPRM will be sent to the Materials Transportation Bureau in May 1979 for their handling.

RECOMMENDATION

Expedite the research to determine the safest position of hazardous materials tank cars and others in freight trains as contained in recommendation R-78-33 and as a result promptly issue regulations for adequate braking and placement of such cars in freight trains. (Class II, Priority Action) (R-78-59).

ANSWER

The FRA is currently utilizing the Train Operations Simulator (TOS) model to analyze train make-up and train handling procedures. This mathematical computer model was initially developed by the AAR under FRA sponsorship, and a copy was sent to the DOT Transportation Systems Center in Cambridge, Massachusetts to aid in the analysis of the placement and braking of cars and locomotive units in a train consist.

In February 1979, the FRA Office of Safety Compiled data on two train derailments involving hazardous materials tank cars. One incident involved the derailment of a Louisville and Nashville freight train at High Cliff, Tennessee, on December 13, 1978. In this accident, a tank car containing sulfuric acid derailed and leaked its contents. The other incident occurred at Pensacola, Florida, on November 9, 1977. This derailment involved the release of anhydrous ammonia gas. Data on these two accidents was coded for input into the TOS, and the results are now being analyzed.

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION
WASHINGTON, D.C. 20590

OFFICE OF
THE ADMINISTRATOR

FEB 21 1980

Honorable James B. King
Chairman
National Transportation Safety Board
800 Independence Avenue, S. W.
Washington, D. C. 20594

Nat. #2739
MC 80-353

Dear Mr. Chairman:

Enclosed are our comments to the National Transportation Safety Board's Safety Recommendations R-79-65 through 67 as outlined in Report Number NTSB-SR-79-2, On the Progress of Safety Modification of Railroad Tank Cars Carrying Hazardous Materials.

Sincerely,

John M. Sullivan

JOHN M. SULLIVAN
Administrator

Enclosures

RECOMMENDATION

"Issue promptly a regulation to require that all DOT Specification 105 tank cars which transport hazardous materials be equipped with top and bottom shelf couplers by December 25, 1980." (Class I, Urgent Action)(R-79-67)

ANSWER

The FRA is in the final stages of developing a Notice of Proposed Rulemaking (NPRM) for the issuance by the MTB which addresses this subject. This NPRM will propose the retrofit installation of the top and bottom shelf couplers on all DOT specification tank cars along with an overall upgrading of these cars in a manner similar to that proposed in MTB Docket HM-144 for DOT Specification 112 and 114 tank cars. Due consideration is being included in this NPRM concerning the necessary timing required to retrofit couplers on approximately 28,000 tank cars. This NPRM is scheduled for publication in the Federal Register in March 1980.

Mr. KING. Just one correction, Mr. Chairman, for the record. When we quoted a cost for an E-60 coupler, this is a straight coupler, it is $591.10 as of this morning, and for the E-60 shelf coupler it is $793.10, a difference of $202 on the set of couplers.

So to complete one car, those were the numbers we used to generate the figure, sir.

Mr. MATSUI. Thank you very much.

Mr. KING. Thank you, Mr. Chairman.

Mr. MATSUI. Mr. William Dempsey from the Association of American Railroads.

STATEMENT OF WILLIAM H. DEMPSEY, PRESIDENT, ASSOCIATION OF AMERICAN RAILROADS, ACCOMPANIED BY WILLIAM J. HARRIS, SC. D., VICE PRESIDENT OF RESEARCH AND TEST; AND A. WILLIAM JOHNSTON, VICE PRESIDENT OF OPERATIONS AND MAINTENANCE

Mr. DEMPSEY. I'm accompanied by Dr. William Harris, who is the head of our research and test department, and Mr. William Johnston, who is head of our operations and maintenance department of the AAR.

I would like to ask that my full statement be incorporated in the record.

Mr. MATSUI. Yes, it will be.

Mr. DEMPSEY. I would like to touch on the highlights of that statement and try to respond to some of the questions which have been raised in the course of the previous witnesses' testimony.

We are glad to be able to be here. We have always and continue to regard railroad safety as a problem of preeminent importance and one which is quite an appropriate subject for continuing oversight of this committee and Congress.

I would like to begin by noting our conviction that while nothing is perfect and there is certainly room for improvement in railroad safety, at the same time one should recognize the fact that relative-

ly speaking our record is good, both in terms of our general freight operations and our transportation of hazardous materials.

For example, in 1979 we had the lowest level of fatalities in railroad accidents since recordkeeping began in the last century, and that is not an aberration. That continues a progressive downturn in railroad fatalities for the last 14 years. That is heartening.

At the same time I think one must take note of the fact that train accidents, as they are defined by the Federal Railway Administration, are increasing, and that is disheartening. But it is not nearly as significant a figure such as the decline in fatalities, and that is largely because of the way in which train accidents are defined for reporting purposes.

For a train accident, all that is required is that there be $2,900 worth of damage to railroad property. In terms of railroad operations that is really a fender-bender. That is the kind of damage you would have in a very low speed yard derailment, which is much less serious than a blown-out tire on a truck on the highway.

In terms of injury to people, and that is what we must be most concerned with, of course, train accidents don't play a very large role at all. Indeed, train accidents accounted for only about 3.7 percent of all the fatalities we had in the railroad system last year. Most of these train accidents are not of large consequence. Over 60 percent of them involve less than $10,000 worth of damage. Only 22 last year involved as much as half a million dollars and only 5 really major ones involved $1 million or more.

If one looks behind these figures and looks at what we would regard as serious train accidents, those costing $100,000 per year or more, one sees that over the last 4 or 5 years that kind of train accident level has remained relatively constant.

Let me say a few words about the transportation of hazardous materials. Trains are by general recognition the safest method of transporting these kinds of materials. That is why shippers choose railroads for about 70 percent of this business. Trucks transport only 30 percent of hazardous materials but are involved in 90 percent of all hazardous materials accidents, 70 percent of the fatalities and 80 percent of the injuries.

Last year we had a good year. We didn't have a single fatality associated with the transportation of hazardous materials. And again, 1979 was not unrepresentative. If you look at the history of the last 10 years, you will see that in 5 years there was not a single fatality. In 3 of the other 5, there were one or two fatalities a year.

1974 and 1978 were years in which we had major tragic occurrences, which have focused, quite properly, the attention of the Congress and the regulatory agencies on this type of transportation. We think important progress has been made in the development of safer containers, safer equipment for transporting this type of commodity.

By what I have said I don't mean to imply that we think that nothing more can be done. That certainly is not true. We need to pay constant attention to everything associated with safety in order to improve upon the present situation.

Let me say a few words about what is going on and what avenues we think hold some promise for improvement. First of all, I think it is important to note that almost everything that pertains

to the operation of trains is relevant to rail safety: The type of equipment we use, the operating techniques we employ. So there is a very strong economic motivation to improve safety because as you improve safety, you also improve service, by and large.

Now, in that sense, very important steps are being taken. In 1979 we hit an all-time high for spending for capital improvements and maintenance, and that followed previous all-time highs in 1978, 1977, and 1976. These figures, I suggest, are especially impressive when one considers they are made against a backdrop of chronically depressed rail earnings, of earnings less than 2 percent in every one of these years, except 1979 when we may have had a 2.5-percent rate of return on investment.

These expenditures, these capital improvements, capital investments ought to pay off in decreasing the incidence of derailments, and it appears that they are. We are very heartened by the fact that our preliminary data for 1979, or FRA's preliminary data, indicates derailments are off 18 percent during the first 9 months of that year.

There are a number of programs in place that have to do with operations of the railroads. Many of them are cooperative, and I think they indicate how fruitful cooperation between the Federal Government, its agencies and private industry can be.

One of them is called track train dynamics. It is now in its seventh year. It is a program supported by FRA, the AAR, individual railroads, and even the Transportation Development Agency of Canada. In that program, for example, they have developed a set of guidelines for train handling that tell an engineer exactly how to handle his train under a variety of different conditions of terrain and climate and makeup of the train.

These guidelines have been extensively adopted by the railroads. They have eliminated a large number of derailments which were theretofore inexplicable. In addition, we have developed a large number of analytical models which have been used to assess the probable behavior of new equipment. They have resulted in significant changes in equipment to analyze the causes of derailment and so on.

The FAST facility I am sure you have heard of, the Facility for Accelerated Service Testing out at Pueblo, Colo., which is run, again, cooperatively by the Federal Government and the railroads. It contains a 4.8 mile loop in which a train circles on a continuous basis, and that enables us to make much more accurate and expedited studies of equipment and track components.

Tank car safety. The committee has heard a great deal about the cooperative programs which have been ongoing with respect to tank car safety and which culminated in the first phase in 1977 with the regulations with respect to couplers, head protection and insulation.

This project with respect to the 112s and 114s tank cars will be completed by the end of 1980. By that time we would expect there would be a virtual end to the violent rupture of these types of tank cars that have the potential for such great disasters.

A word about grade crossing accidents. It is a matter of great concern to us, as it is to Mr. King and to others in the Federal Government. Some 1,000 people will die at grade crossings this

year, by every indication. There has been a notable improvement, although there has been, between 1967 and 1978, a 40 percent increased exposure because of increased traffic. Still the fatalities have dropped 52 percent during this period of time.

That is a notable improvement, but 1,000 deaths a year at these grade crossings is unacceptable. There is no easy answer. In the overwhelming number of these cases, the cause is the fault of the driver. We have one case after another in which drivers will drive around the barriers put down at the grade crossings. Indeed, we have had a number of cases in which they not only drive around but drive into the side of moving trains.

In addition to the kind of expanded program with grade crossing protection which we have always supported strongly we spend about $100 million a year on maintenance of grade crossing protection devices, which is about 30 or 40 percent of our net operating revenues for last year.

Mr. MATSUI. May I ask you a question there, Mr. Demsey? You may not know the answer to this, but is there any methodology used in spending that money? I was in local government in California and I know that the railroads themselves pay for this.

What happens usually is the neighbors in a particular area will get upset and come to their local officials, who will talk to the staff, and the staff will put pressure on the railroads. That was fine when it was in my district and I got a grade crossing, but it is not necessarily the most ideal way to do these things. In other words, there may or may not be a real need for them.

I am wondering whether or not a methodology had been developed by the industry and whether the FRA is willing to work with you people on developing a methodology.

Mr. DEMPSEY. It has not been the FRA; it has been the FHWA. It has been regarded as a highway function, and each year moneys are appropriated in the highway legislation. We maintain them, but for installing new devices, they are worked out in collaboration with the State authorities.

Do you wish to explain it in any more detail?

Mr. JOHNSTON. The State sets the priorities.

Mr. MATSUI. I guess you answered the question. You are saying if you had your way of doing it, perhaps you would allocate this money in the same way or a different way, but you have no control over it. And apparently the FRA has little jurisdiction over this right now or are not assuming it. Is that correct?

Mr. JOHNSTON. For the most part, yes. There may be some differences of opinion as to what crossings should be protected first, but for the most part I think the States' priorities are proper.

Mr. DEMPSEY. We have worked in close collaboration with the States. As Mr. Johnston has said, I can't speak for every State in the Union, but by and large we have been quite satisfied with the way in which the States have administered these funds. We would hope there would be more funds, and we do continuously ask for them.

Mr. MATSUI. Thank you.

Mr. DEMPSEY. There is a need, obviously, for education to alert the public to the problem inherent in grade crossings, and we have been actively engaged in collaborative efforts for education with

the National Safety Council and the States in what is called in most of the States "Operation Lifesaver."

It is really quite heartening to see the impact that even a modest education effort can have over a period of a year or two in reducing grade crossing accidents. That seems to us to be one of the most promising avenues available to us now in that area.

I would like to make another point. We examine all of the data on safety for research and test planning, and we think accumulation of a data base and an analysis of that data base is extremely important.

We have been working with the FRA closely in those areas. And as we look at those data, it becomes clear to us that there is no single measure or series of several measures that can be taken that would have a major impact on rail safety. That is simply explainable, I think.

The fact of the matter is that for whatever reason, most of the most prominent causes of unsafe conditions on the railroads have been taken care of. So what we have left is not a perfect safety record, by any means, but a situation in which the remaining causes of casualties, fatalities, train accidents are diffuse.

By solving one of them, you make some impact but not a major impact. For example, we are very concerned with employee casualties, and we have turned now to an analysis of the human factors element that is involved in casualties. Plainly, that is a very important element.

As we look at the data, we can see that if we completely eliminated any one of the highest ranked causes of employee casualties, we would improve our overall safety record by only a few percentage points.

That doesn't mean that it shouldn't be done. It means it should be done. But it does mean the problem is a relatively intractable one which does not lend itself to simple solutions. I may say in that connection it doesn't lend itself for the most part to legislation or more regulations.

We feel that would be largely counterproductive. When you have a regulation, a new piece of legislation, what you do is you tend to focus concentration and efforts on that particular area, quite naturally, because you want to be sure you are in compliance with the regulation or legislation.

But unless you have a really significant problem you are dealing with, you tend to divert resources and attention away from other areas which you really should be examining. If you look at the causes of employee injuries, for example, 25 percent are caused by stumbling, slipping, and tripping.

Now, what single measure or even a relatively condensed group of measures could come to grips with such a broad problem? The use of tools, 10 percent; handling materials, 8 percent; getting on and off trains, 5 percent; and so on. The nature of the problem does not lend itself to easy solutions.

Well, then, what do we think is the most promising approach overall? First of all, continuation of the programs already in place, such as track/train dynamics. Second, we think a better use of FRA data to monitor trends and assist in the development of safety programs.

We would welcome the opportunity to work with the FRA in this kind of research using this data. We have already worked with them, we think, in a mutually productive way to improve the reporting system, and we think what remains to be done is to make better use of the data we have.

I think, finally, a continued support of FRA safety research program that has been so very helpful in the past is an essential element of improving safety in the future.

I would like to say a word or two about some specific pieces of legislation that have been proposed. First of all, let me address some of the issues raised by H.R. 6497, and here I will touch mainly on those provisions that have to do with employees' rights.

There are a set of these kinds of provisions, all of which we oppose. Section 3 of that bill would authorize the collective bargaining representatives, the union representatives, to bring enforcement actions in the Federal court for violations of the safety regulations, where the Secretary of Transportation has decined to act.

This strikes us as an extreme remedy. What is being suggested here, I take it, is that the Secretary cannot be relied upon to enforce the safety regulations and Safety Act. I won't say that it is absolutely unprecedented in American jurisprudence to have private enforcement of public rights, but it is certainly a rare sort of thing.

I have something else to say about that. I don't think it can be demonstrated that the Secretary has been derelict in his duties to enforce the Safety Act or the safety regulations. I have one other thing to say about it as a matter of personal experience and personal opinion.

I was for 5 years the chief labor negotiator for the railroads. Before that I served as an attorney for the railroads in labor matters. It is a pernicious sort of thing; it is inimical to collective bargaining to have unions and companies lined up on opposite sides of a lawsuit.

I don't mean that it should never be done. Indeed, we sued the unions; but when we did, I felt it signalled the collapse of the collective bargaining machinery. We have union representatives on the witness stands and management representatives on the witness stand, and lawyers for both sides trying to impugn the veracity of each of them.

As I say, while I don't say it should never happen, I do say it has a corrosive impact on labor relations and should never be sanctioned or encouraged by the Federal Government except under the most extreme circumstances.

The next set of provisions, I think, come under the general heading of antiharassment provisions, which would markedly change the structure of the practices under the Railway Labor Act.

The first provision would provide that a railroad could not discharge, harass, or discriminate against an employee who refuses to operate defective equipment which he reasonably believes to be in violation of the act or regulations. That is with respect to equipment.

We are talking about defective equipment which that employee reasonably believes to be in violation of the act or regulations, or an employee who refuses to work in a place, and again similarly

phrased, where he reasonably believes there is present an imminent danger to his safety and health.

I think that when one looks at that kind of a provision, at first at least my reaction is, well, that doesn't sound so bad; what is wrong with that? But the fact of the matter is that in our judgment, a net cast so broadly that it would give employees that kind of authority would promise to interrupt railroad operations in a very, very serious way.

For example, railroad operations in the yard take place and must necessarily take place in all kinds of weather, in blizzards, snow storms, ice storms. Now, if an employee, a yard man, says to his supervisor: I am not going to work out there; for goodness sakes, look at that ice and snow; I could slip and hurt myself; and after all, there is equipment moving around this yard. Who is to say that that is not within the meaning of that provision: a reasonable apprehension of a danger to his safety or health.

Insofar as violation of the act and regulations is concerned, we have believed for years that there have been regulations that have not been intimately geared to safety, and indeed the FRA now recognizes that fact by virtue of their recasting of the regulations pertaining to safety of equipment and safety of track, safety of locomotives.

But still, we have regulations that govern the way in which a piston travels in the air brake system. If an employee says: In my judgment that piston travel regulation is not being complied with on this one piece of equipment in this whole train, who is to say he is not able then under this kind of legislation to halt the operations of that train.

So that provision seems to us to be a serious threat to the continuity of rail operations. I have something else to say about it but I will defer that for a moment and say it in connection with the next subsection, which is somewhat similar. But what this one does, as we look at it, is authorize wildcat strikes in these kinds of situations.

Subsection b says any employee who determines that his equipment or place of work is unsafe and therefore, under the previous subsections, could not be penalized for not working there or not moving the equipment, that he has another right. He has the right to ask to be reassigned.

If he is not reassigned, and that is often difficult in railroads because of the craft line restrictions we have, if he is not reassigned, he shall have the right to stop working, and now I quote, "either individually or in concert with others," others, apparently, who agree with him.

As I say, what this seems to us to do would be to give every employee in the operation of the railroads in conjunction with people who would be associated with them the right to conduct wildcat strikes.

Now, this provision giving individual employees these rights, I want to note, operates without the restraint and discipline of a union. Our union representatives are people in whom I have a good deal of confidence. They are people with whom I have worked for a good many years. They are honorable people, and by and large they are responsible and have the interests of the railroad at heart.

Obviously, I cannot say that without exception for every union representative, but by and large that is my opinion about this group of people. And I say the same about our employees. We are proud of our employees. For the most part they are dedicated individuals.

But no industry operates without some bad apples, and we have some, and unhappily, they often tend to congregate in particular locations. If this kind of statutory license is given them to halt the operations of a railroad by what would amount to wildcat strikes, we are very fearful of the consequences.

There is a final antiharassment provision which in principle is much less objectionable. Under that provision, the railroads could not discriminate against the railroad employee because he notified the Department of an alleged violation of the Safety Act or had filed a proceeding based upon a violation of the act or testified in a proceeding about the administration of the act.

I don't think that there is anything, in principle, wrong with that provision except that it is redundant. Under existing law, under the Railway Labor Act as it has been construed in arbitration proceedings, if an employee is unjustly discriminated against, discharged or disciplined in any way for any one of those occurrences, the employee always wins, and that is the way it should be, it seems to me.

So the objection is simply that we should not, in this industry, in particular, in which we are so greatly overregulated now, enact yet another law when the law that is in place and the decisions which have been made under it are quite adequate for the purpose.

There is another section, section 7, which makes it unlawful for a railroad to provide transportation to its employees to available lodging at a designated terminal so that the employees will arrive at their facility within 30 minutes after their release.

In some circumstances that is physically impossible the way train operations are scheduled now. But the preeminent consideration, it seems to me, here is that once again, as fairly often happens, we are dealing with a matter not of safety but of collective bargaining.

Lodging issues, issues of transportation to and from lodging, have always been dealt with in the collective-bargaining process. The purpose of the Hours of Service Act is to promote railroad safety, and I cannot see any evidence at all or any reason to believe that the distance of the employee's lodging from his home or away from home terminal has the slightest relationship to railroad safety.

There are a couple of provisions in the bill that we do support. Section 213 protects the reemployment and seniority rights of railroad employees who go to work for the Department of Transportation or the Interstate Commerce Commission, and a new section 214 would specify that safety inspectors and safety specialists be classified at not lower than GS–12's and 13's, respectively.

We support both of those provisions because we think it is terribly important to attract railroad safety personnel of the highest caliber to the Department and to the FRA.

As to the administration's draft bill which was annexed to Mr. Sullivan's statement, I would ask the opportunity to examine it with more care. I will note, though, preliminarily that the provi-

sion amending section 203 of the Safety, dealing with emergency powers would be a provision we could not support in its present form.

This is the provision which evidently is designed, as far as I can tell, to overrule the court decision in the *Louisville and Nashville* case, at least in some respects. In precisely what respect, it is not clear to me. It does change, for one thing, the type of finding that will permit an emergency order.

Under the statute as it exists now, the Secretary must find a defect in a facility or piece of equipment. Now, that is a fairly concrete notion, but that would be changed here to an unsafe condition or practice, which is far from a concrete sort of notion.

There are arguments, for example, among the railroads about how long it takes to train a person to be an engineer. Some railroads say that can be done in 6 months. Others say that they think it takes 1 year. It is plainly a practice. This amendment would appear, to authorize the Secretary to exercise his judgment on that matter and say that a railroad that has a 6-month training program has an unsafe practice which involves a hazard of death or injury to persons, and therefore we get an emergency order.

It seems to me that is too rubbery a notion, particularly when the proposed provision goes on to make it difficult for the court to interfere. And that is the acknowledged purpose of the judicial review provision of subsection (d).

One thing they have done here is to wipe out the ordinary TRO, temporary restraining order, as an available remedy. This is something that we would find difficult to live with, particularly if the kind of order they are talking about is one like the one to be issued against the L. & N., which involved a 30-mile-an-hour speed restriction on all trains on the whole system carrying hazardous materials.

Hazardous material cars are present in very many of our trains, and that order would have brought operations on the L. & N. to a virtual standstill. It was because of the inadequate evidentiary basis for the order that the court set the order aside in the first instance in the form of a temporary restraining order.

I think that what needs to be demonstrated here is that the court acted imprudently in the *L. & N.* case and that some sort of legislative relief is necessary. We would ask that the committee examine the record of that case and come to its own judgment about whether it was the Department or the court which acted imprudently.

That concludes my remarks, Mr. Matsui.

[Testimony resumes on p. 169.]

[Mr. Dempsey's prepared statement and attachments follow:]

STATEMENT OF

WILLIAM H. DEMPSEY

PRESIDENT

ASSOCIATION OF AMERICAN RAILROADS

BEFORE THE

TRANSPORTATION AND COMMERCE SUBCOMMITTEE

OF THE

HOUSE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE

ON

REAUTHORIZATION OF THE FEDERAL RAILROAD SAFETY ACT OF 1970

March 25, 1980

The Association of American Railroads welcomes the opportunity to comment here today on reauthorization of appropriations to carry out the purpose of the Federal Railroad Safety Act of 1970.

My name is William H. Dempsey and I am president of the AAR. Appearing with me today are Dr. William J. Harris, vice president of Research and Test, and A. William Johnson, vice president of Operations and Maintenance.

The railroads which are members of the Association employ 94 percent of the workers, produce 97 percent of the freight revenues and operate 95 percent of the line-haul trackage in the United States.

With the permission of the Subcommittee, I will offer a brief oral summary of my comments, but I ask that our full statement along with its extensive documentation be included in the record.

I can say at the outset that the U.S. railroad industry supports the reauthorization for appropriations to carry out the purpose of the Federal Railroad Safety Act and we agree completely with the Subcommittee that railroad safety is one of the most important issues facing Congress today.

When viewed in perspective, I believe that this Subcommittee will agree that the railroad safety record -- both in general freight and with respect to hazardous materials

operations -- is a good one. Preliminary 1979 figures from the Federal Railroad Administration indicate that total fatalities in railroad accidents last year were the lowest since record-keeping began in the last century. I emphasize that 1979 was not an anomaly. Last year was consistent with a downward trend for the past 14 years in railroad fatalities in all categories: passengers, employees, trespassers, and others (the preponderence of which are highway grade crossing fatalities). The fact is total fatalities have declined in 11 of the past 13 years. For example, in 1978 there was a total of 1,646 railroad fatalities. When we deduct grade crossing accidents -- which are almost always the fault of the motorist, and trespassers, the number of fatalities is reduced to 135. Last year, total fatalities dropped to 1,443. Again, when grade crossing fatalities and trespassers are separately considered, we have 123 fatalities. A complete breakdown of safety statistics is provided in Appendix A.

An understanding of the facts with regard to railroad safety requires first an understanding of the three major FRA accident categories: train incidents, non-train incidents and train accidents.

A "train incident" now refers to an occurrence in which there was relatively little property damage (less than $2,900 to railroad equipment) but which resulted in death or injury.

As a result of the changes in reporting criteria for injuries beginning in 1975, the total number of incidents is now disproportionately larger than in earlier years.[1]

A "non-train incident" relates to a fatality or an injury which occurs during the operation of a railroad but does not involve any movement of trains. Casualties in this category may involve standing rail equipment, maintenance-of-way activities or personnel working with tools and equipment in yards and repair shops.

"Train accidents" is the category which receives the most public attention. Such accidents may or may not involve injury or death. The reporting criterion is tied to financial loss. An accident is a "train accident" if it involves at least $2,900 damage to railroad property -- whether or not it involved any injuries. Even a simple yard derailment -- far less serious potentially than a truck tire blowout -- can result in costs that are this high. In 1975 and 1976, the threshold was $1,750 and in 1977 and 1978, $2,300.

In 1978, the latest year for which there is completed data available, there were 11,277 train accidents. Approximately 43 percent of these accidents were caused by defects in track or

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[1] After January 1, 1975, the FRA changed its reporting criteria which resulted in injuries and occupational illnesses being reported that had not previously been reported because they did not result in at least one day's lost time. All injuries requiring more than first aid must now be reported. Thus, current figures are not comparable with earlier ones.

structures, 19 percent by equipment problems, 25 percent by human factors and 13 percent by other factors. Deaths in this category totaled 61 (excluding grade crossings). Stated another way, train accidents accounted for only about 3.7 percent of total deaths. Reported train accidents statistics for 1975 - 1978 are provided in Appendix A.

Of those trains accidents, over 60 percent incurred monetary damages less than $10,000 -- significantly less than the price of one new freight car. Of the total accidents, only 402 involved damage of more than $100,000. Only 102 of that number involved damage of more than $250,000, 22 of that number involved damage of $500,000 or more and only 5 of that number involved damage of $1 million or more. Such a great difference between the most costly accidents and the cost of most accidents indicates that the vast majority of accidents are, indeed, not very serious in monetary terms.

Moreover -- and more significantly -- if the inflation factor is removed by applying 1975 dollars to the cost of accidents, and the level of traffic is considered, it can be seen that serious derailments -- those involving the most property damage and the most serious threat of death and injury -- have remained constant in recent years.

I have not made this explanation for the purpose of criticizing the reporting standards. However, we have been disappointed in the past by FRA's limited use of these data to

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monitor trends, identify potential safety problem areas, and assist in the development and evaluation of safety program goals and priorities. The industry would welcome the opportunity to work with FRA in the formulation of safety and research action programs using these data. The railroad industry and the FRA have worked together to develop and improve the reporting system. We look forward to the opportunity for continued participation with FRA to develop further improvements which will permit more accurate determination of the causes and consequences of accidents.

The current FRA criteria and procedures for data collection are adequate to monitor trends and provide indications of potential problem areas which may require more detailed investigation. This data collection and analysis system on an industry-wide basis should not attempt to pinpoint the specific nature of each safety problem or to support in-depth analysis. Once the industry-wide system identifies potential problems that appear significant, then appropriate action should be taken, including notification of railroad representatives and recommendations for corrective action. In some cases, special studies may be appropriate, requiring the collection and analysis of detailed data. Such studies, conducted at the individual carrier level, will more accurately determine such factors as accident frequency, severity, and specific causes.

These data should then be analyzed to determine whether the problem deserves a high priority and, if so, the kinds of research or action that may be required. Such a national data collection and analysis system can help point to potential problems, assist in establishing programs, and monitor the effectiveness of safety programs.

Certainly the Federal Railroad Safety Act has played a role in helping make railroads a safe mode of freight transportation, a role we would not like to see misdirected because of common misconceptions about railroad safety. Misconceptions, for example, concerning track-related accidents, the carriage of hazardous materials, the importance of grade crossing safety, human factors, and so on.

I think it must be emphasized that no new regulation or legislation is needed. What is needed is careful analysis of the total situation and of reports provided to the Federal Railroad Administration in order that funds and activities can be directed in ways that will provide the greatest payout in terms of improved safety.

And it must always be remembered that there are trade-offs involved. Some safety requirements -- however well-intentioned -- might actually reduce safety if they result in greatly increased rail freight costs. For example, it might be theoretically possible to design a railroad tank car that would be absolutely impervious to rupture, but if the cost of using

the car resulted in a diversion of hazardous traffic to the highways the result would be more, not fewer, fatalities from hazardous materials transportation.

Railroads represent by far the safest form of transportation of hazardous materials. That is one of the main reasons that shippers choose railroads for 70 percent of the business.

The fact is highway tractor-trailer trucks, which transport only 30 percent of all hazardous materials, are involved in 90 percent of all hazardous materials accidents. According to federal statistics and the National Transportation Safety Board, trucks are involved in 70 percent of the fatalities and 80 percent of the total injuries of all such accidents.

I would also like to caution you that perceptions can be misleading. A superficial reading of train accident statistics might lead one to believe that this would be a fruitful area for new safety regulation. Noting that track accounts for more derailments than any other single cause, it might seem logical to assume that significant expenditures of money for track and more stringent regulation of track quality would produce great safety benefits.

Yet, if all train accidents in 1978 -- the last year for which we have full statistics -- had been eliminated, it would have reduced the fatalities by only 3.7 percent and injuries by only 2.3 percent. If track had been eliminated as a cause of

accidents, it would have reduced fatalities from train accidents by only 5 percent.

I do not mean to leave the impression that railroads are not concerned about such accidents. They are greatly concerned because their real impact is economic.

Poor track, which requires that trains be operated at low speeds to minimize the possibility of serious accidents is an economic problem. For this reason, railroads are stretching scarce resources to improve the railroad rights-of-way.

In 1979, spending for capital improvements and maintenance reached a new all-time high of $14 billion. This followed record capital spending of $12 billion in 1978, $9 billion in 1977, and $8 billion in 1976. And I should point out that these records were achieved in the face of industry earnings which remained at inadequate levels. In 1979, the railroad industry had an income of only $922 million and a rate of return on investment of a mere 2.7 percent, one of the lowest of all major industries in this nation.

In 1979, $4.6 billion was invested in track, roadbed, and facilities, compared to the previous record level of $4 billion in 1978. Another $6 billion was spent last year for equipment maintenance, up from the $5.2 billion price tag in 1978.

Actions in the past, such as slowdowns, served to stabilize the incidence of costly derailments, but not, of course, minor

derailments. However, preliminary figures for 1979 seems to indicate that railroad spending in recent years is paying off. These figures show a decline in all derailments of 18 percent during the first nine months of the year.

Perceptions can also be deceiving with regard to hazardous materials. There is no denying that an accident in which liquified petroleum gas explodes is spectacular and may rightly be classed as a disaster. Nor would I argue that any accident involving release of dangerous products or the burning of volatile substances is not a serious matter.

But I must emphasize that it would be grossly misleading to characterize the movement of these materials by rail as a clear and present danger to population centers. In 1979, there was not a single death due to a hazardous materials accident. Out of more than 1.1 million carloads of hazardous materials shipped by rail last year, there were only 112[2] instances of hazardous materials releases from derailments.

This is not to say that the railroads are complacent about hazardous materials safety. Although the cars primarily used for the transport of such products as Liquified Petroleum Gas (112 and 114) are almost all owned by shippers, the railroad industry is cooperating fully in the retrofit program authorized by FRA. Shelf couplers have been installed on all

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[2] Preliminary 1979 data.

such cars and the complete three-part retrofit of coupler, head shield, and insulation is scheduled to be completed by the end of this year.

The AAR is currently involved in a program, jointly funded by FRA, to test and study the smaller 105 tank cars to determine if any added protection is necessary to bring them to the level of safe operation we have now in the retrofitted 112 and 114 cars. Because the results should be available in mid-1981, it seems inappropriate at this time to pursue legislative or regulatory solutions.

Where then are the areas upon which attention can be focused fruitfully? I think it must be said that there is no single area where the cause of accidents is so marked as to provide an easy "handle" by which to bring about a noticeable reduction.

Employee safety provides an illustration of this.

Some 99.8 percent of all reported employee casualties are injuries, and only 50 percent of these involve lost work days. Since 1967, there has been a 22 percent increase, however, in injuries per million employee hours, and the AAR has initiated an extensive human factors research program. But just as there are no easy answers to derailment accidents, there are no easy answers to employee safety.

The causes? Stumbled, slipped, and tripped caused 25 percent of all employee injuries in 1978; use of tools, 10 percent; handling materials, 8 percent; handling ties, 6 percent; striking or struck, 6 percent; getting on or off, 5 percent; coupling, 4 percent; operating switches, 4 percent; and so on.

The Federal Railroad Administration and the Association of American Railroads have been engaged in research on safety since the expansion of their program in 1970.

While other factors are responsible for a greater portion of fatalities and injuries, derailments are responsible for the most potentially dangerous of railroad accidents -- the release of hazardous materials. It was, therefore, concluded by both organizations that attention to derailment prevention was crucial and that many of the aspects of derailment prevention required better materials, or better inspection methods, or better operating practices, or appropriate combinations of these.

Major research activities undertaken by both organizations in some cases separately and in some cases in cooperative, jointly managed programs include the following.

Tank Car Safety Research

In 1970 both institutions began the study of the processes in a derailment that lead to the violent rupture of tank cars carrying flammable compressed gas. It was clear, after much

study, that a release of product, a subsequent fire, and processes that had to do with the overheating of the tank car shell, lead to the ultimate release of the product and the rocketing of the ends of the ruptured tank car. Studies starting in 1971 were directed at means of controlling this sequence. These culminated in 1977 in the issuance of HM-144 and the retrofitting of the 112 tank car fleet with head protection and with high-temperature insulation. This project will be completed by the end of 1980. By that time, there should be a virtual end to the violent rupture of these tank cars. Information learned in these programs is clearly applicable to other kinds of problems, particularly head puncture during derailment, and may be found to be applicable to other cars carrying hazardous materials. The reason for attention to the containment of a product in a tank car that may be involved in a derailment is that derailment prevention is much more difficult. Examination of mainline derailments reveals that they are distributed over more than 150 different causes, most of which account for less than one or two percent of all mainline derailments. Notwithstanding this problem, serious work has been in progress for several years in such areas of improved rail materials, improved rail inspection, improved track structures, and improved dynamic response. These programs are drawing on advanced technology and the

university community as well as on the effective work being performed by the manufacturing industry that supports and supplies the railroads.

Track-Train Dynamics

Among the most important programs in progress in this field of safety is Track-Train Dynamics. This program began in 1972 and is now in its seventh year. It is a program supported by the FRA, individual railroads, the railroad supply industry, the Transportation Development Agency of Canada, and the Association of American Railroads. Through this program, there have been developed a set of guidelines for train handling that describe precisely to a locomotive engineer the optimum manner of maintaining his train in a stable, dynamic condition under a wide variety of terrain, climatic, and consist conditions. These guidelines have been widely distributed throughout the railroad industry and constitute a new basis for revision of individual railroads' train handling guidelines. They have been very extensively adopted and utilized and have eliminated a large number of heretofore unexplained derailments.

In the Track-Train Dynamics program a large number of dynamic, analytical models have been developed. These models have established the dynamic response of cars and equipment. They have been used to assess probable behavior of new equipment and have resulted in some extensive changes. They

have been used to analyze derailments and have taken out of contention some views as to what might have caused the derailment. They have been used to check train handling practices and to refine them. They have been used to establish guidelines for track maintenance by making possible studies in ranges where operations are not feasible because of potential risk of accident. In short, these analytical models have had wide application and continue to be important in defining the basis for improved practices within the industry. Under Track-Train Dynamics a number of efforts are in progress to provide the locomotive engineer with more information about how he can handle a train with more explicit information on forces in the train than is currently available. Under the program, guidelines for the design of new classes of freight cars, more dynamically stable, are being issued in anticipation of their extensive use. In short, this program has provided the FRA and the railroad industry with deep insights into opportunities for improvement and has provided specific needs of translating those findings into action.

Facility for Accelerated Service Testing

Another major cooperative effort is the Facility for Accelerated Service Testing, also known as FAST, operated at the Transportation Test Center in Pueblo, Colorado. In this program, the FRA provides the operation of a train that circles

a 4.8 mile loop many times a night so as to expose the track structure and the equipment to an operating environment between five and ten times the intensity level of conventional railroad operations. By having a single consist operate over the track, variables can be isolated and comparative studies made between equipment or track components with much more precision than is possible in revenue service with a variety of trains and cars that must be moved over the system. Deficiencies in some equipment have shown up before that equipment was introduced in service. Opportunities for choosing advanced technology have emerged and are being adopted by many railroads in their procurement decisions.

Locomotive Control Compartment Committee

The Locomotive Control Compartment Committee charged with the responsibility for improving safety in locomotive cabs was organized in 1970. This committee of labor, FRA, and management representatives has the responsibility for studying the safety issues in the locomotive cab and recommending measures to alleviate these problems. Early in the work of this committee, an analysis was made of the causes of injuries in cabs. The location of the door handle was found to be unsatisfactory thus leading to serious hand injuries, including the loss of fingers from occupants of the locomotive cab. A redesign was instituted which is now in universal application

in new equipment and being retrofitted on many older pieces of equipment that has totally eliminated this problem. Other equally important matters have been dealt with by the Locomotive Control Compartment Committee, including the development of a performance requirement for an advanced locomotive cab seat that provides more support and more safety to the locomotive engineer. This cooperative program has not involved substantial expenditure by the FRA or the AAR, but it has made it possible to bring into cohesive form the concerns of labor, the interests of the industry, and the responsibilities of government. It has been effective, and it has contributed to significant improvements in safety; and its work is continuing.

These examples indicate the critical importance of new knowledge in resolving some of the safety problems confronted by the industry. The analysis of information about safety reveals, however, that there are no problems of such a character that their solution will make a revolutionary change in railroad safety. We recently completed an analysis of employee casualties by job classification, nature of injury, and what the employee was doing when the injury was sustained. The purpose was to assist in the development of safety program priorities based on accident frequency and severity. This analysis revealed that the complete elimination of any one of

the highest-ranked safety problems, measured in terms of number of injuries or number of lost work days, would improve overall rail safety by only a few percentage points. This came as no real surprise. The profit incentive to reduce accident rates has already resulted in the correction and control of the major safety problems in the industry. The implication is clear, and the record supports that implication. There is no systematic, clear definition of narrow points of focus to alleviate fatality and injury problems. Accordingly, it cannot be expected that legislation or regulation will have a profound impact on safety. All that can be hoped for is fine tuning of the system. That fine tuning requires new information, new knowledge, new insights gained from research. It requires an aggressive but flexible environment for the application of that new knowledge. Legislation and regulation tend to freeze a system and deny the opportunity for flexible response as opportunities arise. Heavy-handed enforcement of regulations that can do very little for safety tend to deflect interest and attention away from new concepts that may emerge from research. Thus, there is much to be said for a more flexible approach toward safety provided there is adequate investment in research and an adequate commitment to the application of research by the railroad industry. That commitment exists, the research resources are modest but are being used effectively.

FRA needs continued funding support as does the AAR. Effective railroad safety is being pursued. Attempts are being made to find out by research methods which practices by what companies are important to improved safety. Once that information is developed, it will be made widely known to the industry; and others will be urged to adopt it. Thus, support of FRA's safety program is an important safety research program and in the long run is an essential element of improving safety by the railroad industry. That research program should be accompanied by an awareness of the flexible approach necessary to ensure effective utilization of advanced ideas.

Another area of great concern, but which also has no simple solution, is the death toll at grade crossings. It can be predicted that about 1,000 persons will die at grade crossings this year. This number will represent substantial improvement over past years -- but it is the largest single cause of rail-related fatalities and as Appendix A shows -- overshadows all others by a considerable margin.

Between 1967 and 1978, the actual exposure at grade crossings increased 40 percent. This is due mainly to an increase in motor vehicle miles. U.S. railroads are currently spending $100 million a year just for the maintenance of active traffic control devices. This is more than one-third of the total U.S. railroad industry income in 1977. As a result of

this investment and cooperative programs funded by the FRA, the Federal Highway Administration, and other concerned parties, grade crossing fatalities have dropped 52 percent since 1967. (See Appendix B for detailed statistics.)

As I have said, however, there is no simple answer to reducing grade crossing deaths -- unless government at various levels would undertake the massive expenditures that would be involved in physically separating all highways from the tracks they now cross.

The overwhelming majority of grade crossing deaths occur as a result of error on the part of an automobile driver. Difficult as it may be to believe, there are numerous cases in which drivers not only drove around physical barriers but actually drove into the side of a moving train.

Quite obviously, then, education rather than regulation is the greatest need. And that is what the railroads are undertaking -- in cooperation with the National Safety Council and state governments -- in their current programs.

While I have touched briefly on a number of the subjects in which the Subcommittee has expressed an interest, I would like to note again that my full statement as submitted for the record contains more detailed discussions of these and other issues.

Employee Safety Programs

Perhaps the greatest impact on safety in the rail industry will come from a comprehensive study of the effects of human behavior on railroad safety which began three years ago in the Safety and Special Services Division of AAR.

Recognizing the limitations of mechanical solutions to problems which are largely the result of human behavior and systems errors, the industry began exploring better approaches to understanding and managing the human element -- the prime contributor in over 38 percent of accidents which are occurring.

A number of industry efforts are focusing on different phases of this problem:

1) Employee Assistance Programs -- Many railroads currently have or are installing programs to help employees cope with problems such as alcohol and drug abuse. Seven roads recently participated in a government sponsored study of program effectiveness which brought out the contributions these programs are making to employee safety.

2) Study of Individual Safety Programs -- Railroad safety programs generally consist of training and orientation, accident investigation and analysis, inspections and audits, personal protective equipment, work place environment monitoring, and employee participation and motivation. To determine which safety programs are effective in preventing

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injuries, the AAR is participating in a government survey which will identify effective programs. Results will be furnished to the industry for application on individual properties.

3) Training -- According to a recent government study, railroads now spend $40 million per year to prepare employees to work safely in the railroad environment. More effective safety training methods, which will address specific needs of both managers and employees, are currently being evaluated.

Many different methods are currently being used by the industry to provide training for employees. It is recognized that much of the "training" is a one-time activity and that attempts to measure quality in terms of hours spent in training can be very misleading. Current research is attempting to establish both the best methods which can be used to train employees to safely perform duties and productive methods which can be used to motivate them to use the procedures taught.

Effectiveness of Federal Safety Regulations

We in the railroad industry have gone on record as supporting the findings by the Office of Technology in its report entitled "An Evaluation of Railroad Safety" that the regulatory activities of the Federal government have had no apparent effect on the railroad accident rate. But it is also clear that this accident rate does not portray a situation which is out of hand. The most important consideration is that

the regulatory process is not the solution to improved railroad safety.

It is true that many of FRA's safety regulations have been counterproductive, but one of the more encouraging developments during the last two years has been the FRA's comprehensive review of the railroad safety regulations. Shortly after the promulgation of the 1970 Rail Safety Act, the FRA issued numerous regulations. Many were not related to safety. Many required premature maintenance and thus diverted limited rail resources from other essential programs. Most of the fines assessed by the FRA were issued for violations of regulations clearly unrelated to increased safety. In 1978, in response to President Carter's Executive Order 12044, the FRA began a comprehensive review of the old regulations. Numerous hearings have taken place, and we hope that the new regulations, which we expect to be issued during the next several months, will be more cost effective than the current regulations.

Preliminary cost studies indicate that the new freight car regulations will avoid the unnecessary expenditure of several million dollars annually. Similarly, it is anticipated that the new locomotive inspection standards will eliminate extremely expensive requirements which have not been necessary from a safety standpoint. We will continue to work with and encourage the FRA to revise the old regulations and develop new standards which truly address safety and which will not present unreasonable burdens on railroading.

We also anticipate that with a more analytical approach to the task of ordering priorities in the area of rail safety, FRA will not be encumbered with obligations to implement nonproductive programs which deflect resources from beneficial safety programs.

State Involvement in the Federal Inspection Program

Currently, the Federal program does not preempt State regulatory enforcement authority. There is a rather detailed regulatory scheme under which states may become certified to carry out and assist in enforcement of many railroad safety regulations. The major concern with the State inspection programs is the constant need to ensure that State employed inspectors meet Federal qualifications. Importantly, the judicial enforcement power resides primarily with the Department of Transportation. Recognizing that basic regulatory authority over safety should be kept within one Federal agency, the House Committee on Interstate and Foreign Commerce stated that

> "The Committee does not believe that safety in the Nation's railroads would be advanced sufficiently by subjecting the national rail system to a variety of enforcement in 50 different judicial and administrative systems. Accordingly, while it has preserved the framework of certification, it has modified the concept insofar as it applies to the nation's rail system to make all enforcement Federal in nature."

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> "The Committee believes, however, that such a vital part of our interstate commerce such as railroads should not be subject to this multiplicity of enforcement by various certifying States as well as the Federal Government." (Emphasis added) (H. Rpt. 91-1194, 91st Cong., 2nd Sess., 1970, pp. 11 and 19.)

Under current Section 207 of the Federal Railroad Safety Act (45 U.S.C. Sec. 436), the Secretary of Transportation receives notice of a violation of a regulation from a state agency participating in investigative and enforcement activities under the 1970 Act. He then has 90 days to assess a penalty, commence a civil action to obtain an injunction, or state in writing that no violation has occurred. If he fails to take one of these actions, the participating state agency may apply to the local United States district court for enforcement.

As H.R. 2366 would amend Section 207, a state participating in the investigation and enforcement of the Federal railroad safety stnadards would be authorized to determine that there is probable cause that a railroad has violated a safety regulation and, upon making that determination, order the railroad to show cause why it should not be ordered to cease and desist from such violation. The state would then hold a hearing and, if it determined that a violation did exist, would order the railroad to cease and desist. Thereafter, the state could apply to the district court for enforcement of its cease and desist order. The Secretary would be served with a copy of the complaint and would be permitted to intervene as of right.

The proposed amendment specifically contradicts a portion of Section 206 of the 1970 Act ("State Participation"):

> The Secretary shall retain the exclusive authority to assess and compromise penalties and (except as otherwise provided by Section 207 of this title) to request injunctive relief for the violation of rules, regulations, orders and standards prescribed by the Secretary under Section 202(a) of this title and to recommend appropriate action as provided by Sections 209 and 210 of this title. (45 U.S.C. Section 435)

Certainly, if a state agency could issue cease and desist orders on its own volition, the Secretary would be effectively deprived of exclusive authority to assess and compromise penalties and to recommend the penalty actions set forth in Section 209 and the injunctive relief actions set forth in Section 210.

This eliminates any direction or oversight by the FRA and opens the way for dozens of interpretations of railroad safety rules, regulations, and standards, one interpretation for every state which is certified. It is absolutely essential to safe railroad operations that rules be unambiguous and that there be no misunderstanding of them by employees and their supervisors.

The rules must apply uniformly, regardless of what state a train might be in. There can be no more unsafe arrangement than to introduce uncertainty into the interpretation of rules and the enforcement of the safety standards governing them.

Uniformity of regulation is at least as important to safety today as it was in 1970 when the Federal Railroad Safety Act was passed. For the sake of safety, the careful scheme

allocating rail safety responsibilities between the Secretary of Transportation and the certified state agencies in the 1970 Act should not be disturbed so as in any way to diminish that essential uniformity.

Pending Legislation

The proposed legislation which will be submitted to the Congress by the Administration has not been made available in sufficient time for us to address the specific recommendations. We would appreciate the opportunity to submit whatever comments we may have after a resonable opportunity to review the proposed legislation.

We have been advised that the Department of Transportation is recommending legislation which would broaden the Secretary's emergency powers under the Railroad Safety Act and which would limit a carrier's right to seek immediate judicial relief from unwarranted and unreasonable action by the Secretary. Of course, we want an opportunity to review the specific language of the bill.

My initial reaction to this recommendation is that the authority to issue emergency orders affecting conditions or practices is inherently different than the authority to issue emergency orders affecting specific facilities or equipment because the former is likely to cover many safe as well as the few unsafe conditions unless formulated in a precise manner.

The courts have suggested that the present law might permit emergency orders to cover an entire railroad system but only where the Secretary has found that the emergency exists over the entire system. To the extent that the Administration's proposal actually expends the Secretary's authority, the legislation should specifically require that the scope of the order be limited to the identified unsafe conditions. Thus any broadening of the Secretary's emergency powers should include safeguards which would insure that the scope of any emergency order is limited to those conditions which are directly related to the unsafe situations identified by the Secretary. Additionally, the right of obtaining immediate judicial relief where circumstances warrant should not be delayed or restricted. For example, the court review should not be limited to the question of whether an emergency actually exists. The scope of the Secretary's order and the question of whether the order rationally addresses the perceived emergency condition should also be subject to immediate judicial review.

There may be additional recommendations in the Administration's proposal which we may want to address.

H.R. 6497 -- Section 3 of H.R. 6497 would add a new subsection (e) to Section 209 of the Federal Railroad Safety Act (FRSA) (45 U.S.C. 438) which would authorize collective bargaining representatives to bring enforcement actions in the

U.S. district courts for violations of any provision of or rule, regulation, order, or standard prescribed under the FRSA where the Secretary of Transportation has declined to take "appropriate" enforcement action. At the present time, only the Secretary (and in certain circumstances a State agency) can apply to the district courts for enforcement of the FRSA or rules, regulations, orders, or standards prescribed thereunder.

The proposed amendment provides no standards by which to judge what actions of the Secretary are "appropriate" or the elapsed time after which the Secretary has failed to take "appropriate action." Presumably then, railway labor could bring an enforcement action even in a case in which the Secretary has affirmatively determined that no FRSA violation has occurred or that an enforcement action in the circumstances is unwarranted. Moreover, there is nothing in the proposed amendment to assure that the Secretary is accorded sufficient time to assess the merits of an alleged violation. As a result of these shortcomings, an FRSA enforcement agency would be created totally without any direction or oversight from the FRA.

The existence of multiple enforcement agencies opens the way for dozens of interpretations of railroad safety rules, regulations, and standards, perhaps one interpretation for each collective bargaining representative. It would be impossible safely to operate a railroad signal system on the basis of

multiple enforcement policies and rules interpretations. The same is true of operating rules. It is absolutely essential to safe railroad operations that operating rules be unambiguous and that there be no misunderstanding of them by employees and their supervisors. The rules must apply uniformly regardless of who might be the collective bargaining representative of the employees operating under them. There can be no more unsafe arrangement than to introduce uncertainty into the interpretation of operating rules and the enforcement of the safety standards governing them. The proposed new Section 209(e) makes that situation possible, even probable.

Uniformity of regulation is at least as important to safety today as it was in 1970 when the FRSA was passed. For the sake of safety, the exclusive allocation of rail safety enforcement responsibilities to the Secretary of Transportation and the States should not be disturbed so as in any way to diminish that essential uniformity.

Authorizing collective bargaining representatives to bring enforcement actions would have the further effect of inviting railway labor to initiate harassment litigation. Labor representatives could bring actions to enforce frivilous, non-safety related violations as a means of pressing its position in labor disputes. This form of harassment would weaken the effectiveness of the procedures existing under the

Railway Labor Act, and not insignificantly, it would further burden the already crowded calendar of the federal courts.

Section 4 of H.R. 6497 proposes to add a new Section 212 to the FRSA, a so-called anti-harassment provision. The railroads strongly oppose this proposal because it is not, in fact, a safety proposal at all, but a radical revision of the organic labor relations law of the railroad industry, the Railway Labor Act. It is essential that that fact be understood.

Under the provisions of Subsections (a)(4) and (a)(5) of the proposed amendment, the FRSA would provide that a railroad could not discharge, harass, or discriminate against a railroad employee who refuses to operate "defective equipment which he reasonably believes" to be in violation of the Act or regulations promulgated thereunder or who has refused to work in a place where "he reasonably believes [there is] present an imminent danger to his safety and health." Those two provisions would make each individual railroad employee the final judge of the fitness of the equipment which he is called upon to operate or the place in which he is called upon to work. The ultimate authority of railroad management to control and direct its own operations and to make decisions with respect to its plant and equipment would be fatally undermined. The only limitation on the unfettered judgment of each employee in this regard would be whether or not he

entertains a "reasonable" belief that the equipment and work place are unsafe.

Under the provisions of Subsection (b), any employee who determines that his equipment or work place is unsafe or dangerous is given the right, either individually or in concert with other employees, to request reassignment without loss in pay, presumably to other work, and if he is not reassigned, he shall have the right to stop working, "either individually or in concert with others." All employees exercising their rights shall then be entitled to be paid "for all time lost," which presumably means for all of the time during which they refuse to work. This provision would give each employee who is dissatisfied with safety conditions the right to back up his unsupported judgment with the block-buster weapon of a strike -- a strike financed by the railroads as all other employees in sympathy with him would receive compensation from the railroad for refusing to work. Such a right to strike would subvert the long established principles and provisions of the Railway Labor Act, which has been on the books since 1926, and which carefully delineates the circumstances in which a strike may occur, and would confer a license for instant wildcat strikes on every worker on the American railroads. The mere statement of what the bill would do is sufficient refutation of it.

To make the proposal more injurious and intolerable, the proposal would confer jurisdiction over all disputes arising under its provisions upon the federal district courts, thereby delivering a body blow to the long-standing system of referring "minor" disputes or grievances to the Adjustment Boards established pursuant to Section 3 of the Railway Labor Act. Disputes relating to discharge and discipline are traditionally "minor" disputes that would now be handled by the Adjustment Board under existing law.

As a final piece of injury, the proposal would impose penalties not to exceed $10,000 for any violation of these provisions. In short, every railroad worker who is dissatisfied with his safety conditions will have it within his power to call down a penalty of $10,000 on his employer for each condition that he finds to be unsafe or dangerous. The only way a railroad would be able to avoid that penalty would be to yield to the employee's demand for reassignment to other work, a difficult task at best, but one made more complex in view of the multitude of unions in the industry and the limitations on reassigning employees contained in collective bargaining agreements.

Other provisions of the proposed amendment may appear, superficially, to be more reasonable. These are the provisions of Subsections (a)(1), (2), and (3) which provide that no

railroad may discharge, harass, or discriminate against a railroad employee by reason of the fact that the employee has notified the Secretary of Transportation of an alleged violation of the Railroad Safety Act, has filed any proceeding against the railroad resulting from alleged violation of the Act, or has testified or is about to testify in any proceeding resulting from the administration or enforcement of the Act. The vice in these proposals, of course, is that a railroad employee who is discharged, harassed, or discriminated against for any of the reasons stated above is undoubtedly already entitled to protection under the existing discipline provisions in labor contracts which are enforced and administered by Adjustment Boards. Railroad employees are already protected against such treatment under the existing scheme.

Under typical collective bargaining agreements in the railroad industry, an employee is entitled to refuse to work in conditions that he considers to be unsafe. If he is discharged by the railroad for violation of company discipline, he is entitled to seek relief and reinstatement (with back pay) under the Adjustment Board machinery established by law. Decisions have in fact been handed down in such cases in favor of employees, and copies can be furnished to the Subcommittee if desired.

The proposed amendment would confer jurisdiction upon the federal district courts over all such controversies, thereby weakening the existing jurisdiction of the National Railroad Adjustment Board over such controversies, which are known in the railroad industry as "minor disputes."

Section 7 of H.R. 6497 proposes to add a new paragraph (5) to Section 2(a) of the Hours of Service Act. The new paragraph would make it unlawful for a railroad to fail to provide transportation for its employees to available lodging at a designated terminal such that the employees will arrive at the lodging facility within 30 minutes after their release from duty. A designated terminal is statutorily defined as an employee's home and away-from-home terminal. In some circumstances, it is physically impossible to transport an employee to lodging at his home or away-from-home terminal in 30 minutes.

The identity of an employee's home and away-from-home terminal and the employee lodging facilities at each have been and continue to be the subject of collective bargaining. The railroads believe that employee lodging should continue to be handled as part of the collective bargaining process. The purpose of the Hours of Service Act is to promote railroad safety. There is no evidence whatsoever that the distance of an employee's lodging from his home or away-from-home terminal

bears the slightest relation to railroad safety. It is strictly a matter of labor relations which should be dealt with under the procedures set forth in the Railway Labor Act.

Section of H.R. 6497 amends the FRSA by adding a new Section 213 which protects the reemployment and seniority rights of railroad employees who go to work for the Department of Transportation or the Interstate Commerce Commission. Section 6 of the bill adds a new Section 214 to the FRSA to specify that railroad safety inspectors and railroad safety specialists be classified as not lower than grade GS-12 and grade GS-13 of the General Schedule, respectively. The railroads support both of these provisions. The industry believes that it is to its advantage to attract railroad safety personnel of the highest caliber to the Department of Transportation and Interstate Commerce Commission, and we think that these provisions will help such personnel.

Hazardous Materials and Emergency Response

Within the Association of American Railroads, the Bureau of Explosives is charged with the duty of advancing the railroad industry's superb safety record in the transportation of hazardous materials.

The Bureau operates with a field force of 19 inspectors in the U.S. and Canada, a headquarters' professional staff of 8 and a laboratory staffed with three chemists. The field force

spends most of its time performing safety audit inspections on railroad facilities and at the production and shipping sites of the Bureau's over 500 member plants. During the course of a visit to, for instance, a member plant's tank car loading rack, the Bureau inspector will not only verify compliance with applicable DOT regulations, he or she will meet with the loading rack personnel to explain new regulations and to stress the importance of following the safest possible practices, whether or not codified in the regulations.

These visits also occur between the Bureau inspectors and railroad employees working in yards, stations, stores departments, and in train and engine service. Because of their special proximity to hazardous materials cars, a special tape/slide show was developed by the Bureau of Explosives Steering Committee for train and engine service employees. The program is designed to make it easier (and therefore safer) for operating employees to understand and follow the rules on inspecting, switching, handling, and train placement of cars of dangerous chemicals. Several major railroads used the format and content of the Bureau program to produce their own, in order to meet the unique circumstances -- whether by reason of special carrier rules, yard layout, traffic patterns or geography and climate -- on individual railroads.

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In performing their other major activity, members of the Bureau's force of inspectors assist railroads in the mitigation of damage following derailments. Often the outcome of a discharge of hazardous commodities can be materially affected by the early steps taken to clean it up; sometimes, the safety of the wreck clearing personnel can be greatly enhanced by a proper ordering of the priorities assigned to the rerailing, lading transfer or venting of the cars involved in the derailment. The Bureau personnel on scene at a derailment report to and work through the senior railroad official present. Nearly seventy five years of experience in helping the railroad industry and shippers of hazardous materials has proven the worth of this method of emergency response.

Among the many functions of the Bureau's headquarter's staff is the collection of data on the movements of hazardous materials and on accidents involving them.

Bureau of Explosives data shows that the transportation of dangerous commodities by railroad is not a casual business. A quick overview of the major statistics will demonstrate:

- In 1978 the railroads moved about 1.1 million carloads of hazardous materials, 80 percent of those were tank cars
- 42 percent of the hazardous materials traffic is made up of just five commodities: Liquified petroleum gases, caustic soda, anhydrous ammonia, sulfuric acid, chlorine

- The "Top 100" dangerous commodities account for 98 percent of their total traffic

- About half of the nation's 200,000 and some tankers are not only assigned to specific commodities -- most tank cars would fall into that category -- they spend virtually all of their economic lives rolling between the same two points, often on a set time schedule. What these numbers show is that the shippers and the railroads should be intimately familiar with each others' operating needs and have worked out safe practices to accomplish the necessary commerce in dangerous chemicals. That is the fact.

Of the 1.1 million cars of regulated hazardous materials transported in 1978, only 698 were reported to the Bureau as being in any way derailed and only 151 of them lost lading as a result of a derailment. This means that the railroad industry accomplished a derailment/product loss ratio of .014 percent. Another 852 cars were reported to have leaked or splashed some product. These did not all result in an injury, but the railroads are very concerned about "leakers and splashers" because almost always they result from someone at a shippers' loading point failing to secure the fittings or dispatching a car with defective gaskets or seals -- and because almost always it is the railroad employee who is injured as a result of someone else's carelessness.

The railroads believe that even a "leak and splash" ratio of .08 percent can be improved and the Bureau, a major southeastern railroad and a group of concerned shippers got together to prove it. One of the highest concentrations of leak and splash incidents seemed to be keyed to a seasonal movement of a corrosive fertilizer solution out of a relatively small area of Florida. Several visits by the Bureau's inspector assigned to that district, conferences between the carrier and the shippers and a decision to institute car maintenance practices which would better ensure the departure of fully transportation ready vehicles paid off. From more than 60 incidents of leaking or splashing in 1978, there have been fewer than five during the current season.

This kind of record is not just a chance occurrence. In 1978 there were 221 injuries related to the transportation of hazardous materials -- in 1979, there were just 14. In 1979 there were no deaths related to the rail carriage of dangerous commodities. This was a very typical year, for despite all the publicity that railroad accidents involving hazardous materials receive, during the decade from 1970 to 1979 there were no fatalities due to this kind of transportation in half those years. In three other years, fatalites totalled one or two. Only during 1974, with ten deaths, and 1978, with 24, was the safety record disrupted. Seven of the 1974 deaths happened at

Decatur, Illinois, when a tank car of LPG suffered a head puncture and the resulting vapor cloud errupted into flame with terrible results. The tragedies in 1978 occurred at Waverly, Tennessee and Youngstown, Florida. At Waverly, a pressurized car of LPG suddenly opened up several days after the derailment and at Youngstown, the rails were spread open by vandals, leading to the first deaths due to the rail transportation of chlorine in several decades.

The Decatur accident involved a car type -- the uninsulated, non-protected head, unshelf-couplered car -- that soon won't exist in this country. The improvements to the type 112 and 114 tank cars, developed out of one of the most massive research efforts ever funded by private industry, will be retrofitted by December 31, 1980. The Waverly phenomenon is believed to have been caused by a critical stressing of the tank steel such that it actually changed its grain structure. The ability to see such stresses and to take steps to reduce the chances that they will lead to catastrophic failure are now considerably more advanced than they were in 1978. The chances of an accident like Youngstown happening again are less capable of prediction -- and beyond the practical ability of the railroad industry to prevent.

In addition to the 112 and 114 tank cars just referred to there is another class of tank car that can also be utilized to

carry liquified compressed gases. This is known as a 105 specification car. The 105 car differs from the 112 and 114 car in that it incorporates 4 inches of fiberglass insulation around the tank shell.

All 112, 114 and 105 cars are equipped with a pressure relief valve to allow venting when the internal pressure reaches the level of e predetermined sefety factor. Venting, therefore, is a safety mechanism to accomodate the properties of these liquefied compressed gases which must be moved under pressure. This fiberglass insulation on 105 cars also provides some protection ageinst very high temperetures, as in the case of fires, although in this circumstance it is not as effective as the high-temperature insulation installed on the modified 112 and 114 cars. The 105 cers, of course, could be retrofitted precisely as the 112 and 114 cars have been; that is, they could be required to utilize top and bottom shelf couplers, head shields and high-temperature insulation. The retrofit program for the 112 end 114 cars added about $10,000 to the cost of the cars and resulted in some shift in commodities to the highway because of normal economic competitive forces that govern transportation decisions.

Since the 105 car does have some insulation and does have a steel protective jacket, although not as thick or as protective as the head shield required on the modified 112 and 114 cars,

it is protected to a degree against head punctures and violent ruptures caused by fire. It is a good solution, but may not be quite as good as the 112 and 114 retrofit solution. In this regard, intensive study is in progress founded by the FRA and by the RPI-AAR cooperative Tank Car Safety Test and Research Project. This study is developing information on the mechanical and the thermal resistance to damage of 105 tank cars in the derailment environment. The results of these tests and fire tests and impact tests identical in purpose to those run previously on the 112 and 114 cars should be available by mid-1981. By that time, a decision can be made, based on engineering data, that will establish the extent of added protection, if any, necessary on 105 cars to bring them to a level of safety comparable to that of the retrofitted 112 and 114 cars. It is possible that no additional insulation will be required.

It seems inappropriate to pursue a legislative solution to this problem at this time in light of the studies that are in progress.

The research efforts of this industry and the training efforts of Bureau of Explosives inspectors, mentioned above, are not the only efforts which have been made to improve a good safety record. On February 23, 1978 a group of railroad and

chemical executives met to discuss their common concerns about the safety of transporting hazardous materials by rail. Out of this meeting the Inter-Industry Task Force on Rail Transportation of Hazardous Materials was formed. The Task Force issued an interim report on July 21, 1978 and its final report less than a year later, on June 14, 1979. Copies of both of the reports will be made available in order that the Congress can review at length the efforts of the relevant industries to act without governmental involvement or coercion to bring about beneficial change.

One of the most significant accomplishments of the Task Force was the creation of a program -- "Recognizing and Identifying Hazardous Materials" -- aimed at saving the lives of the often volunteer emergency response forces who are called to protect lives and property in the surrounding community when hazardous material transportation accidents occur. The program was designed to be shown to about 250,000 volunteer firemen in the next two years. It seeks to acquaint fire fighters with the potential locations of hazardous materials in their communities -- the hospital, the agricultural supplies dealer, the local gasoline stations -- and to help them use this ability to recognize dangerous commodities for their safety at the scene of a transportation accident. Persons seeing the three carousels of slides (with tape cassettes) are told where

to find shipping documents and how to use the information on those papers to identify the products. Once identification is accomplished, the program demonstrates several available sources of emergency information -- publications of the Bureau and other recognized experts -- and the CMA's CHEMTREC service.

"Recognizing and Identifying Hazardous Materials" was prepared by the shipping and transporting companies without government funding and is being distributed and shown at no cost to any fire company or community requesting it. Because of the outstanding talents offered by the railroad and chemical industries in developing the program and its distribution system, the total cost will be miniscule in comparison to what is often thought of in programs of such scope.

Paradoxically, the fact that the program is being offered free has been one of the stumbling blocks in the way of a demand for showings in the first months of its availability. Fire fighters long accustomed to the blandishments of emergency response course salesmen have a hard time believing that there is no charge. AAR is pleased to report that those who have seen the program have given it rave reviews. As just one recent example, a group of fire companies from nearby suburban Maryland was viewing the program on a Saturday night when time constraints forced a halt before all the material had been presented. Over a hundred of the previous night's participants

returned early Sunday morning -- on their own time -- to finish seeing the last carousel.

Some have alleged that one of the problems at the scene of a transportation accident involving hazardous materials is the identification of those commodities. It was in an effort to eliminate such problems that the railroad industry developed a special part of the Standard Transportation Commodity Code to relate specifically to hazardous materials. The STC Code was already in use throughout the rail industry (and much of the remainder of surface transportation as well) because it provided a commodity specific identification number for each item known to move in commerce.

It was -- and is -- the basis for reporting movement statistics to the Interstate Commerce Commission and, because the STCC numbers were designed with electronic data processing in mind, the potential to expand the usefulness of the seven-digit commodity identifiers is limited only by the needs and imagination of the computer user.

From STCC came the "49-Series" numbers (all beginning: 49 000 00) to not only identify hazardous materials but to rank them according to primary, secondary and tertiary levels of hazard. Because STCC is product specific, a person burned, for instance, will be able to furnish the medical attendants the exact name of the material (if it was so identified by the shipper) rather than just the generic "Flammable Liquid" descriptor.

Users of STCC have available to them specific identifiers for each of the more than 1600 commodities now regulated by the DOT. Through foresight, the "49-Series" was also designed to be able to accomodate EPA-designated hazardous substances and hazardous wastes when DOT adds them to the commodities regulated for transportation. In practice, the capacity of a seven digit number with internal divisions is limitless.

Of course, commodity identification is only the beginning of the uses to which STCC numbers are put on today's railroads. With computers, the generation of a train consist containing hazardous materials can also cause the generation of emergency response information to accompany those cars to destination. The information automatically triggered is that contained in the Bureau of Explosives publication "Emergency Handling of Hazardous Materials in Surface Transportation." This manual has been widely distributed within the transportation and emergency response communities and, thus, the concurrence of the information at an emergency scene lends a necessary degree of confidence in it.

Once the STCC number for a hazardous materials shipment has been entered into a railroad's computer, it can be put to a multitude of uses. As an example, if a carload of a particular commodity is found leaking in a yard and must be transferred, the yard file can be electronically searched for an empty car

last containing a commodity compatible with the load which must be transferred. Not only this, but the yard file can also show the presence and location of cars carrying materials which could be used to neutralize the spill. If such a car does not now exist in the yard, the consists of incoming trains can be searched and, when the right match is made, its arrival time can be predicted. The potential for the beneficial management of hazardous materials traffic took a major leap forward with the institution of STCC and the railroad industry believes that the benifits have only begun to flow.

Against the proven success of the Standard Transportation Commodity Code, the Materials Transportation Bureau has proposed adoption of a United Nations numbering scheme, a four digit method of identifiers which supposedly has as a benefit the fact that the numbers don't mean anything.

The regulations as proposed by MTB would require that a 4-digit number (the UN-Code) become part of the shipping name, appear on all shipping documents and be attached to tank cars separately from the placards. The alleged purposes of these proposals are two-fold: first, the United States would be brought back into line with the rest of the world and, second, the numbers would provide access to an MTB-developed emergency guide book.

According to information AAR has been able to gather, the UN-Code is not a universal, international identification at

all. Canada is still in the early stages of regulatory consideration, Great Britian has adopted a different system, as has Switzerland, and the majority of the European common market countries are nowhere near mandating the UN-Code as the answer to perceived hazardous materials identification problems.

While members of the Bureau of Explosives' staff screened MTB's emergency guide book for technical accuracy -- their commitment to the safety of railroad personnel and firefighters compelled it -- the proposed format, in their opinion and in the opinion of other industry experts, could mislead the user to the detriment of safety. The proposed guide is not commodity specific but it "lumps" groups of materials under a UN-Code number for reference to a common page within the guide. The proposed guide is subject to misuse if any of the numbers are transposed and, while this is a fault common to any numeric system, it is especially so with a system which has no internal logic (where the numbers do not "mean" anything but merely point to an index).

Serious doubts should be cast on MTB's proposed UN-Code both because it does not represent the best that the state of the art has to offer and because in an era of soaring inflation it simply does not make economic sense for a governmental agency to attempt to duplicate what the private sector already has in place and functioning.

After commodity identification, one of the most vexing problems at a transportation accident involving hazardous materials is finding the answer to the question, "Who's in charge here?" Several entities typically present themselves and, depending upon such factors as the personality of the individuals involved and the state of knowledge each believes the other has, a central focus may emerge which may or may not represent the best solution.

The three most common entities on site -- at least at a derailment -- are the railroad (including, often, a wreck clearing contractor, several representatives of shippers who have responded to the request of the railroad and the Bureau of Explosives district inspector augmented by such of the headquarter's professionals as are appropriate and available), the local emergency response forces (typically, the fire department, but often the Civil Defense forces and, increasingly, the state police) and the Federal on-scene-coordinator.

The railroad's role as a common carrier means that, at least initially, it is responsible for the cars and commodities damaged. This unique legal status does <u>not</u> determine third-party rights or liabilities and it exists as a means of effecting the restoration of vital transportation services. Any change in this role must be seriously examined in order not to disrupt the nation's rail network.

The role of the emergency response forces is primarily one of the protection of lives and adjacent property. They cannot be expected to have the sophisticated knowledge of chemistry necessary to effect a complete clean up, not can they be expected to be aware of the multiple differences between types of rail cars and their cargoes.

The Federal on-scene coordinator is an official pre-designated under the Clean Water Act to focus and coordinate the Federal response to the scene. In the event of the threat of serious environmental damage, and if the railroad for some unknown reason takes no action in mitigation, the on-scene coordinator has certain powers to "take over" and apply Federal resources to reduce the threat.

Experience has shown -- and remember that, with a good accident record, there has not been (fortunately) an overwhelming amount of experience -- that most often these three units with different training and different missions achieve a consensus approach to the handling of the situation and, with no particular drama, the damage is cleared and the transportation services restored.

The railroad industry is unanimous in the opinion that, in the event of conflict about "Who's in charge?", the best single person is the senior railroad official present. First, this person is intimately familiar with the railroad environment and

knows where to go to ensure himself of the particular expertise needed; second, the railroad will have primary fiscal and legal responisbility and so has the greatest incentive to take the right actions and make the right decisions about clean up and mitigation and third, speaking again from actual experience, history shows that when anyone else steps in, more often than not decisions are made which are not the optimum. Shifting to a more positive side, experience has also demonstrated that senior railroad officials have made the right decisions almost always and that there is no demonstrable need to alter the present system.

The railroads and the communities they serve have, by and large, enjoyed superb cooperation during emergency situations from the shippers of hazardous materials. When a train carrying chemicals goes on the ground, the railroads have been able to call the shippers involved -- even in the middle of the night -- and to receive advice and an on-scene response when necessary.

No entity better typifies this than the chemical industry's CHEMTREC service. The CHEMical TRansportation Emergency Center is staffed by trained communicators 24 hours a day. When a call is placed to the CHEMTREC 800 number (800-424-9300) the person who answers can supply information on particular commodities and can contact the shipper to relay additional

information. For a transportation emergency involving chemicals, CHEMTREC can bring to bear a host of talent and expertise. CHEMTREC's services are so reliable and its lines of communications so fast that a number of railroads even use it to contact the Bureau of Explosives -- thus saving a harried railroad dispatcher for communications directly with the derailment site.

Other than the Bureau, CHEMTREC can trigger a response from organizations like the Chlorep teams. The chlorine producers, realizing that they were shipping one of the deadliest and yet one of the most vital of the gases, created Chlorep to provide regional "go-teams" who could respond to chlorine emergencies regardless of the identity of the producer/shipper.

In today's litigation-prone society there is some fear that voluntary actions -- like CHEMTREC, Chlorep or even the on-scene response by an individual shipper -- could lead to potential legal liability. The current costs of litigation are so astronomical that even being named as one of the defendants in a law suit is a severe economic burden.

One way to encourage all concerned -- shippers, carriers, CHEMTREC, the Bureau of Explosives and others -- to continue to provide their very beneficial services is to grant such volunteers protection from litigation. Often termed "Good Samaritan Laws," there are plans and model acts that should be considered for adoption on a nationwide basis.

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AAR believes that affording this kind of protection is so important that it should not be tied to other legislation -- such as that now being considered in the environmental spills area ("Superfund") -- but that it should represent a clear national statement of encouragement to those who step forward to help in times of emergency.

The Tank Car Safety Test and Research Project proved the industry's ability to recognize problems and to find and implement solutions to them -- as long as it can act freely. (Shelf couplers for pressurized uninsulated tank cars were developed and ready for several years before the DOT would permit their installation.) The recent successes with the reduction in the occurrence of leaks and splashes on shipments of corrosive fertilizers from the southeast demonstrates the industry's ability to fine tune what is already a good system and the drastic decline in hazardous materials related injuries for 1979 -- plus the fatality record over the past decade -- adds further testimony to the proposition that no drastic cure is needed for an illness that hasn't struck.

This does not mean that the Congress need not carefully exercise its oversight process in the area of hazardous materials. One such problem -- the proposal by the Materials Transportation Bureau for the adoption of the UN-Code -- has already been explained. Another exists in the proposal by MTB

to adopt standards for intermodal portable tanks that are significantly less strong that those now in force in the railroad industry; even more alarming is the DOT policy, despite the objections of AAR and others in the industry, of granting special permits for the transportation of dangerous goods in intermodal container tanks prior to the adoption -- under the correct administrative rulemaking procedure -- of any standard for these instruments of transportation at all.

The rail industry's standard for intermodal tanks in container-on-flat-car service was adopted with corrections designed into what became the standard proposed by MTB. While the precise details of the railroad's objections are on file with MTB, they can be highlighted in two areas: first, rigidity and crush resistance are significantly less under the MTB proposal than under the AAR Standard; second, nowhere in the AAR Standard are non-reclosing safety vents permitted. (The effect of allowing them is to invite massive product leaks if the portable tanks ever turn over.) Representatives of MTB have argued that the balance of payments on overseas chemical traffic is so favorable to this country that the shippers should not be discouraged by requiring tanks to meet the admittedly more expensive AAR standard. Very recently, it came to the attention of the Bureau of Explosives that about 95 percent of the exemptions granted for intermodal tank traffic have been granted to foreign shippers!

The railroad industry has demonstrated a remarkable ability to bring about a safety record that rightfully inspires pride and it has even more importantly demonstrated an ability to keep improving on that record no matter how good it gets. As long as dangerous chemicals are vital to America's economy and as long as the railroads provide the most economic and safest way to move them on the surface, there will be a hazardous materials concern. The members of the Association of American Railroads believe that now is the appropriate time for that concern to mature from a crisis atmosphere to one of recognition of the worth of what has been, is being and will be done by the shippers and carriers of these materials.

Conclusion

I would like to end my presentation as I began it, by stating that railroading is a safe industry. There are areas which can be improved, and we are working to improve them. But we are not looking at a problem which can be addressed in a sweeping general way by new laws or new rules. Rather, it is a matter of addressing specifically each of the disparate causes of rail accidents and applying to them the appropriate specially-tailored remedy.

APPENDIX A

SAFETY STATISTICS

All railroads are required to report certain classes of accidents and employee casualties to the Federal Railroad Administration. The Research and Test Department of the AAR maintains continuing surveillance of these data and conducts analysis of them so as to identify and rank the comparative importance of the causes of accidents, injuries, and fatalities.

The FRA categorizes accidents into three groupings for reporting purposes: train accidents, train incidents, and non-train incidents. Train incidents refer to occurrences in which there was relatively little financial loss but which resulted in death or injury. Non-train incidents relate to injuries or deaths not involved in the movement of trains. An accident is classified a train accident if it involves at least $2,900 damage to railroad property whether or not it involved any injuries. In January 1975 the FRA reporting requirements for both train accidents and incidents were significantly changed making most of the earlier data not comparable to 1975 through 1978 data.

Figures 1 and 2 show the percentage of fatalities and injuries by type of accident for 1978. Also shown are fatalities and injuries to employees. (In these figures, train incidents and non-train incidents have been combined into the category, incidents). Grade crossing accidents accounted for the largest percentage of railroad-related fatalities, 61

FATALITIES 1978

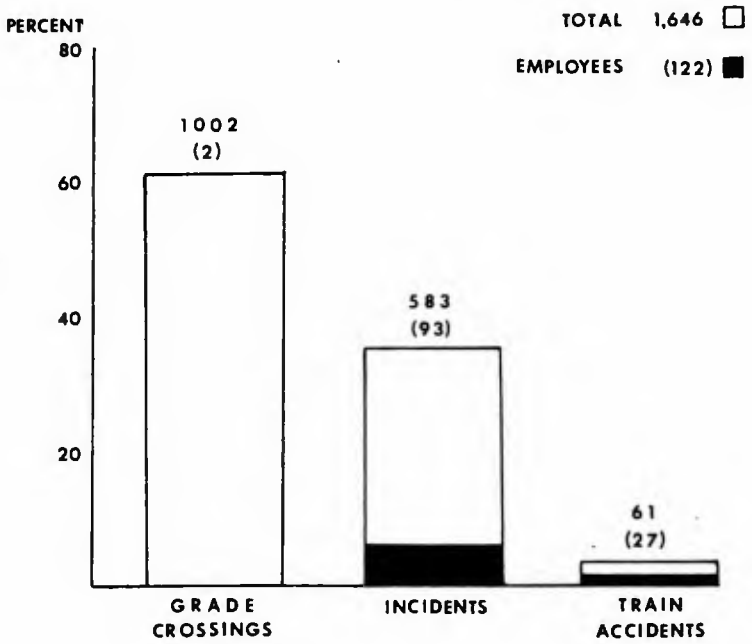


FIGURE 1

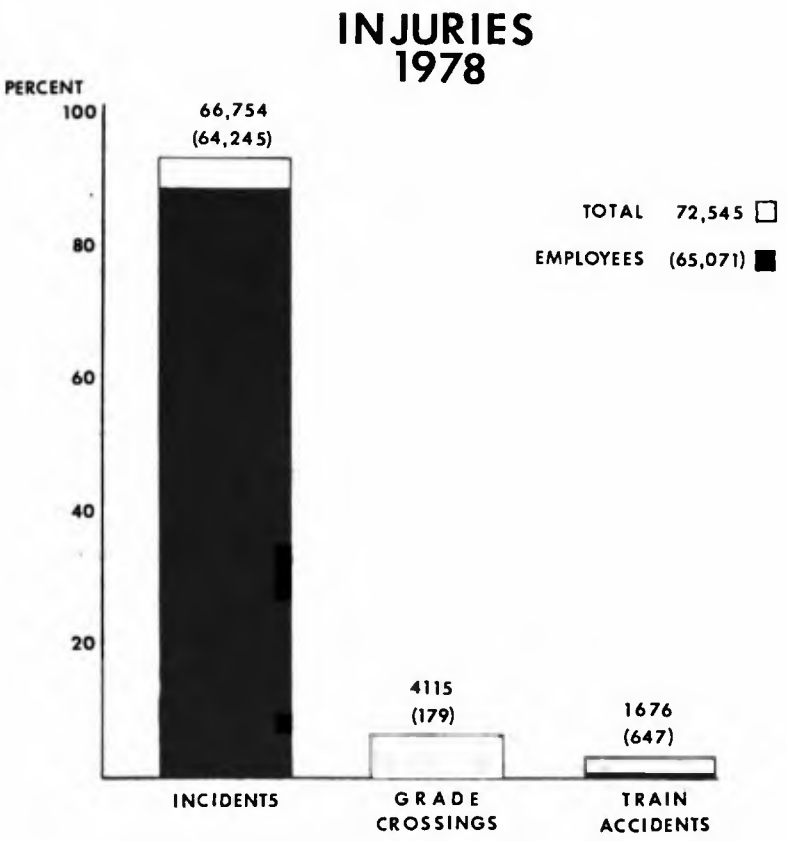

INJURIES
1978
PERCENT
100
80
60
40
20
66,754
(64,245)
4115
(179)
1676
(647)
TOTAL 72,545
EMPLOYEES (65,071)
INCIDENTS
GRADE CROSSINGS
TRAIN ACCIDENTS

FIGURE 2

percent. Train incidents accounted for 35 percent of all railroad fatalities, most of which involved trespassers. Only 3.7 percent of reported fatalities were related to train accidents, and only 2.3 percent of reported injuries occurred as a result of a train accident.

There has been a downward trend in fatalities since 1966, as shown in Table 1. From 1966 through 1978 there has been a decrease of over 1,000 fatalities. Preliminary data for 1979 show the number of fatalities to be an all-time low.

Train accidents receive the most public attention, especially track-caused train accidents. However, as shown in Figure 3, only 5 percent of fatalities and 11 percent of the injuries were the result of train accidents in 1978.

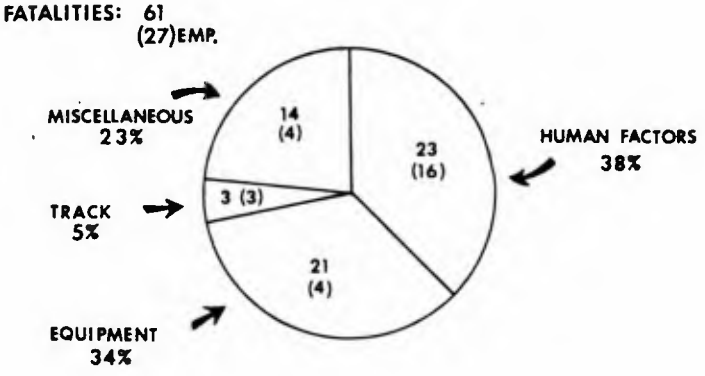
Figure 4 presents the 1975-1978 trends in train accidents at various damage thresholds adjusted for the levels of traffic. The FRA reporting threshold is adjusted bi-annually to remove the effects of inflation. In 1975 and 1976 the threshold was $1,750, and in 1977 and 1978 it was $2,300. In January 1979 it was increased to $2,900. When the inflation factor is applied yearly, the upward trend in accidents is lessened. The curves in Figure 4, stated in terms of 1975 dollars, show that as the damage threshold is increased, the number of accidents is significantly reduced. Over 60 percent of reported accidents have damages below $10,000; and major accidents, those in which damage to track and equipment was greater than $100,000, have remained constant over the last four years.

TABLE 1

NUMBER OF TRAIN ACCIDENTS BY THRESHOLDS (1975 DOLLARS)

YEAR	1975	1976	1977	1978
TOTAL ACCIDENTS	7996	9524	10282	10592
ACCIDENTS WITH DAMAGE ≥$5,000	6613	8026	8746	8882
ACCIDENTS WITH DAMAGE ≥$10,000	3089	3422	3517	3742
ACCIDENTS WITH DAMAGE ≥$25,000	1298	1391	1426	1574
ACCIDENTS WITH DAMAGE ≥$50,000	726	794	807	844
ACCIDENTS WITH DAMAGE ≥$100,000	362	392	413	402
ACCIDENTS WITH DAMAGE ≥$250,000	103	111	132	102
ACCIDENTS WITH DAMAGE ≥$500,000	28	31	39	22
ACCIDENTS WITH DAMAGE ≥$1,000,000	6	5	8	5

TRAIN ACCIDENT CASUALTIES



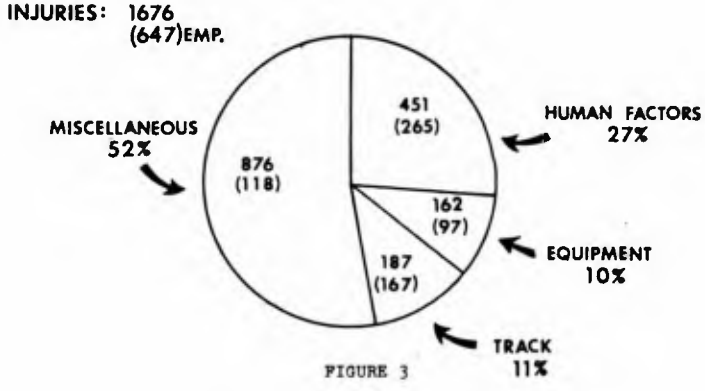


FIGURE 3

TRAIN ACCIDENT TRENDS

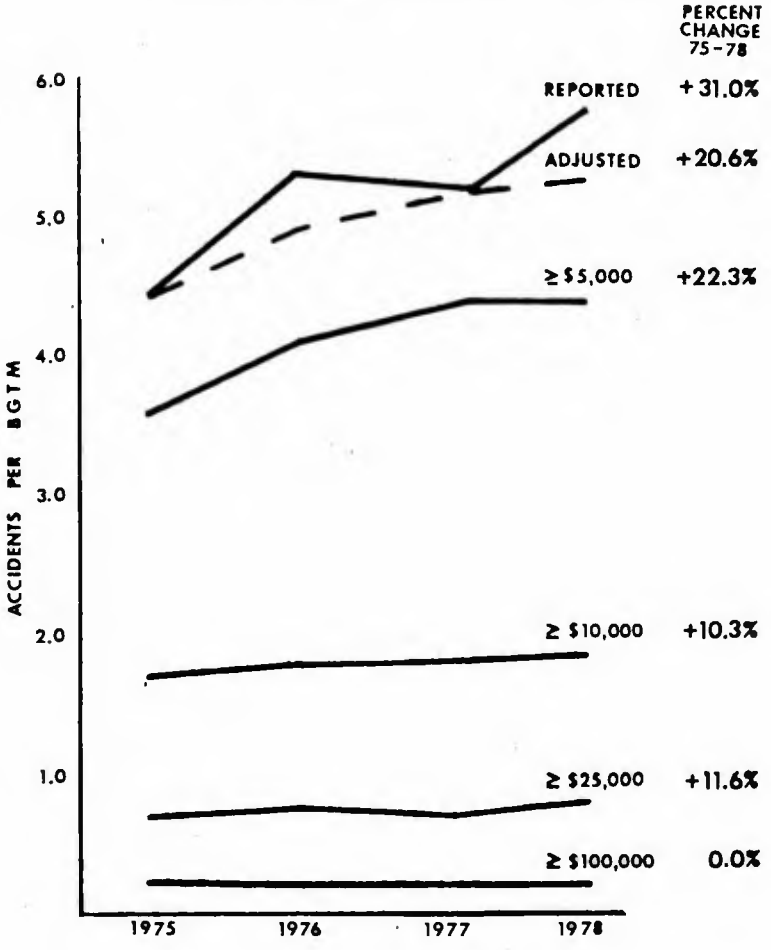


FIGURE 4

A-7

Table 2 shows the number of major accidents -- those involving the most property damage. As can be seen, these accidents have not increased over the last four years. And, when adjusted for levels of traffic, the most costly accidents have decreased.

As shown in Figure 5, the primary types of reported train accidents were mainline and yard derailments which accounted for 70 percent of total train accidents (40 and 30 percent, respectively).

Figure 6 shows the damage trends for these accidents in constant 1975 dollars. As can be seen, mainline derailments alone accounted for almost 70 percent of total reported costs while yard derailments only accounted for 10 percent. As is also shown in Figure 6, reported damages have not substantially increased over the last four years indicating that while accidents have increased, the severity of accidents has decreased.

Figure 7 shows mainline derailments by major cause category. The same breakdown is shown for yard derailments in Figure 8. Equipment-caused derailments decreased in both mainline and yard derailments. Track was the leading cause of both mainline and yard derailments. These derailments increased 17 percent on mainlines and 40 percent in yards over the last four years. But, as mentioned earlier, these yard derailments are much less significant in terms of damages than mainline derailments.

TABLE 2

RAILROAD ACCIDENT FATALITIES: 1966-1979

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
PASSENDERS	23	12	11	6	8	16	47	6	7	8	5	4	13	9
EMPLOYEES	159	166	146	178	155	118	127	158	140	110	100	114	122	114
TRESPASSERS	678	646	628	627	593	551	537	578	565	524	458	458	492	510
OTHERS [1]	1824	1659	1574	1488	1469	1325	1234	1174	1196	918	1121	954	1019	810
HWY. GRADE CROSSINGS [2]	1780	1632	1546	1490	1440	1356	1260	1185	1220	978	1099	941	1002	894
TOTAL	2684	2483	2359	2299	2225	2010	1945	1916	1908	1560	1684	1530	1646	1443

[1] The preponderance of these fatalities occurred in highway grade croasing accidents.

[2] Fatalities distributed in four previous categories and not duplicated in the total.

Sources: Fatality and injury statistics for years 1966 through 1978 from FRA Accident/Incident Bulletin: Summary and Analysis of Accidents on Railroads in the United States; for 1979, from Preliminary Report of Railroad Accidents/Incidents and Resulting Casualties, FRA.

TRAIN ACCIDENT TRENDS

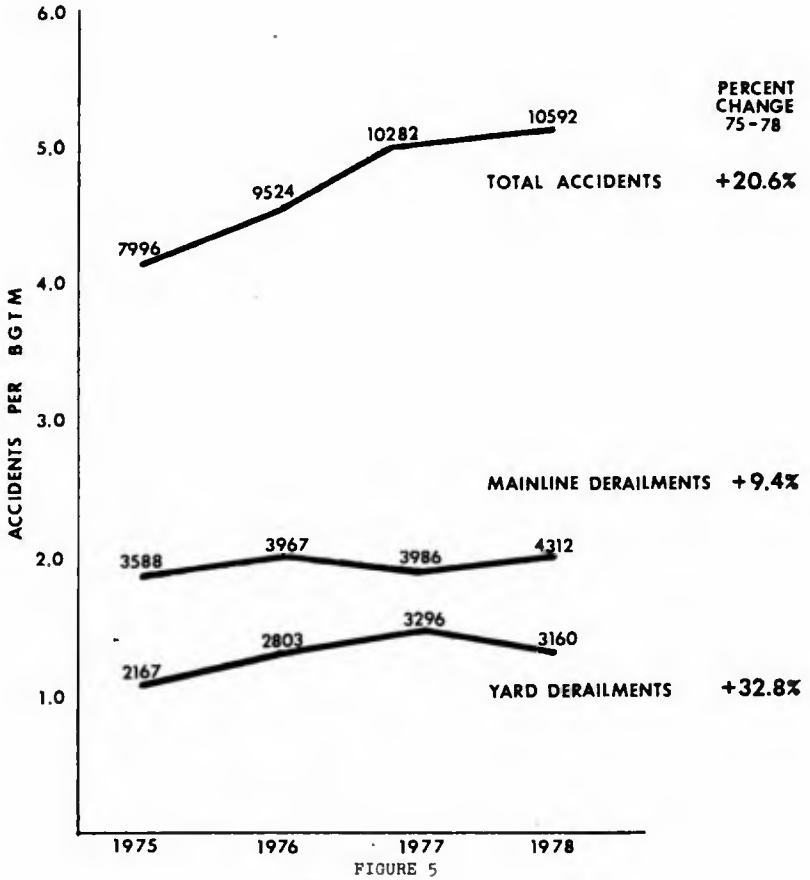


FIGURE 5

DAMAGE TRENDS

(CONSTANT 1975 DOLLARS)

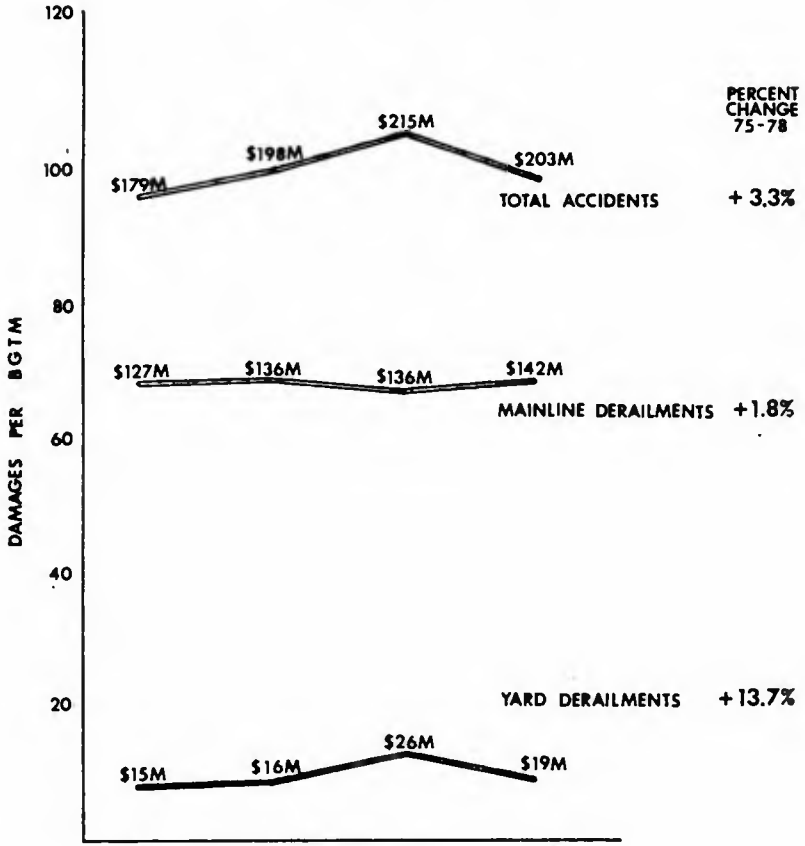


FIGURE 6

A-11

MAINLINE DERAILMENTS

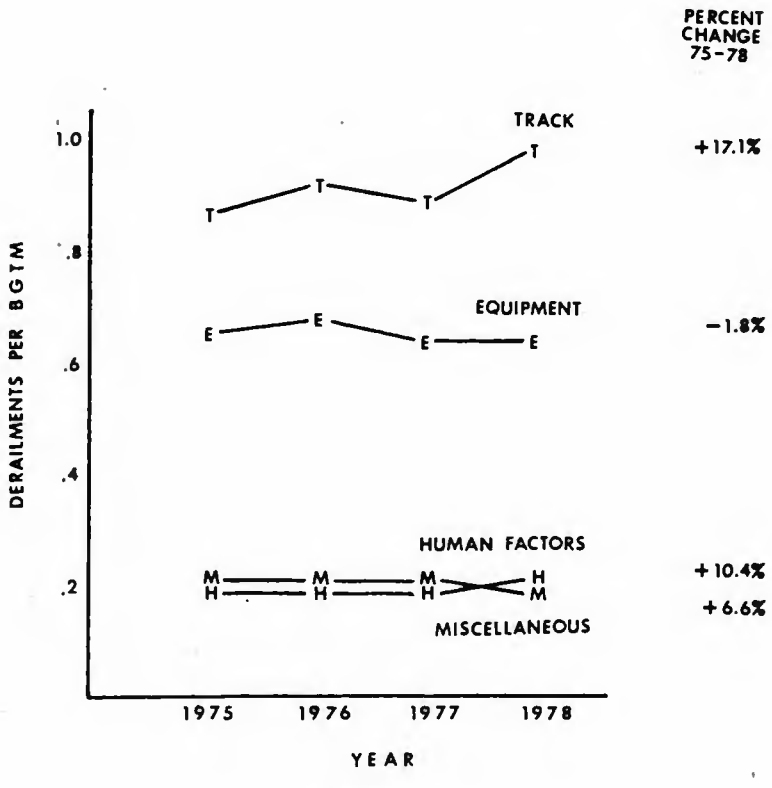


FIGURE 7

A-12

YARD DERAILMENTS

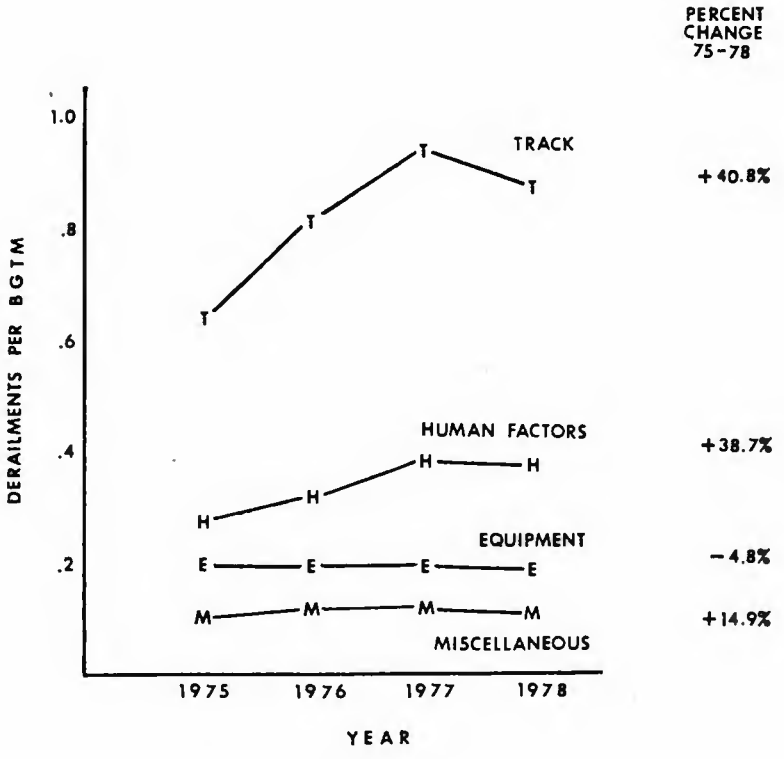


FIGURE 8

A-13

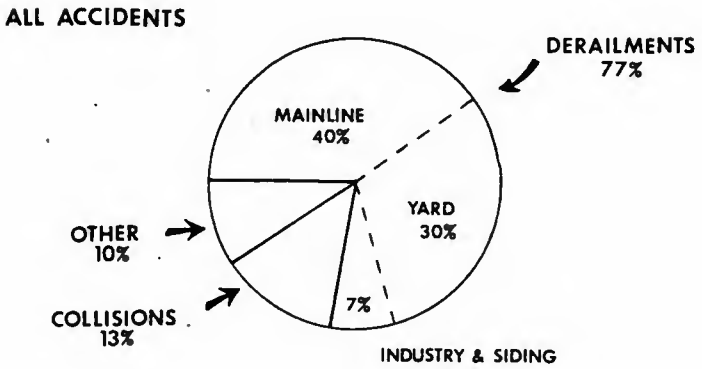
The next three figures relate to train accidents involving hazardous materials. The presence or release of hazardous materials is not a basis for reporting. These accidents were reported based on a dollar damage threshold. Figure 9 shows the types of accident for hazardous materials releases and for total accidents. As can be seen, mainline derailments were much more significant for accidents involving a hazardous materials release than for accidents in general.

The percentage of total accidents that resulted in a release of hazardous material has remained relatively constant over the last four years, as shown in Figure 10. About 4 percent of reported accidents involved damage or derailment of hazardous materials cars. Only about 1 percent of accidents resulted in a release of hazardous material.

The mainline derailment cause tree shown in Figure 11 presents the percent of mainline derailments which resulted in a release of hazardous material. This cause tree shows the cause subgroups within major categories of track, equipment, and human factors. Each of these cause subgroups shown represent many specific causes. For example, rail and joint bar defects include almost 20 individual causes, such as bolt hold crack or break, horizontal split head, worn rail, joint bar broken, etc. The analysis grouped cause codes because no one cause code accounted for significant percent of total mainline derailments or release derailments.

Causes of release derailments were varied and did not appear significantly different than the causes of derailments

TYPES OF ACCIDENTS



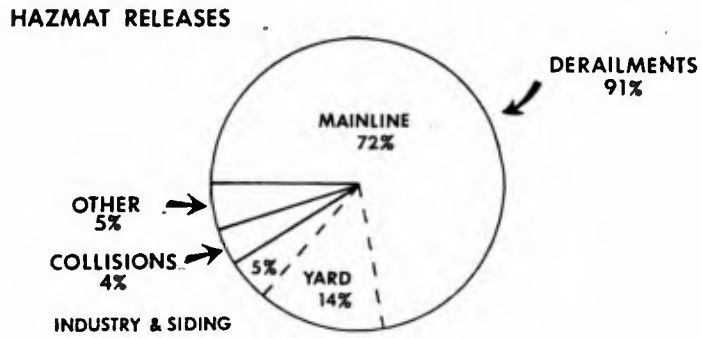


FIGURE 9

A-15

PERCENT OF ACCIDENTS INVOLVING HAZARDOUS MATERIALS

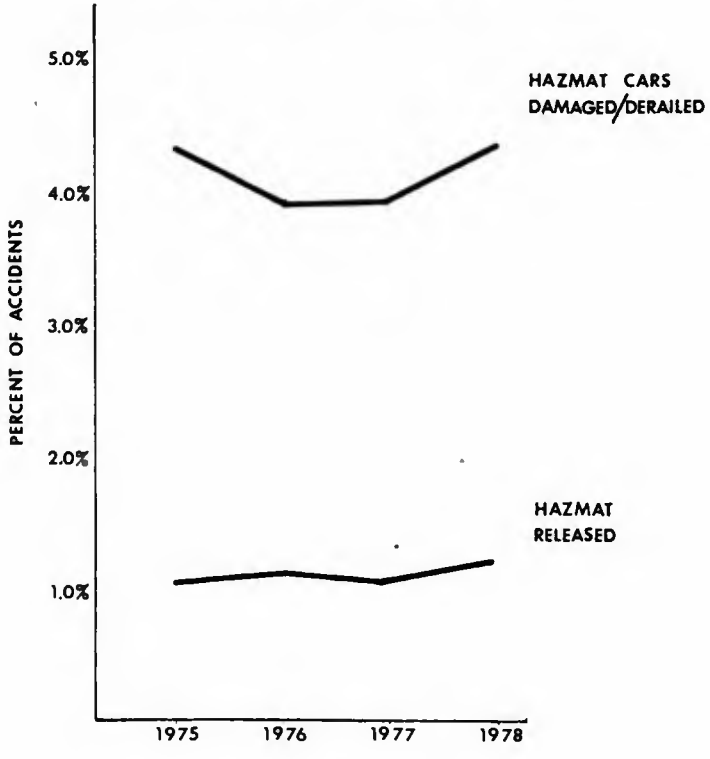


FIGURE 10

A-16

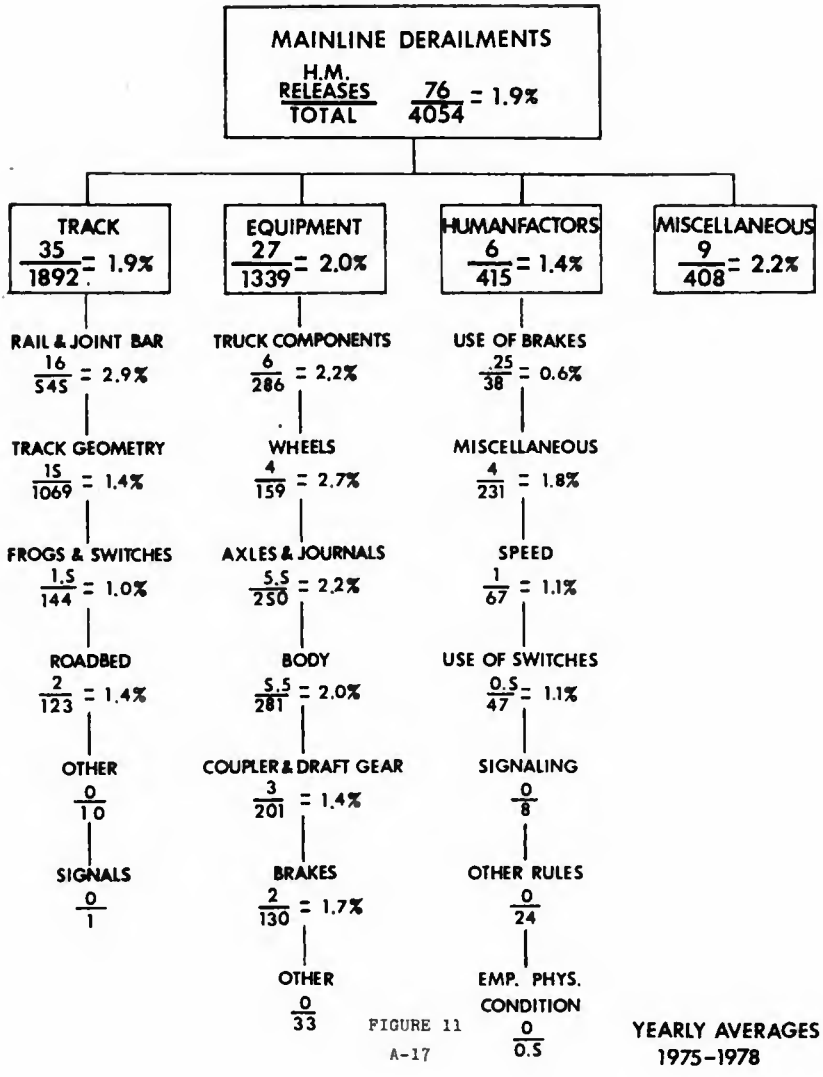


FIGURE 11

A-17

in general. This points out that the elimination of derailments from any one individual cause would have little impact on derailments involving the release of hazardous materials or overall safety.

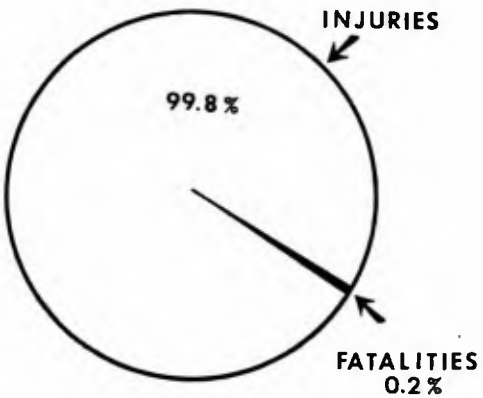
Employee Casualties

As mentioned earlier, railroad casualty data are filed monthly with the Federal Railroad Administration The most current data available covers the period from 1975 through 1978. The AAR completed an analysis of employee casualty data in December 1979. Some of the more significant findings are discussed below.

As shown in Figure 12, there are over 56,000 casualties reported annually. Of these, about 110 or 0.2 percent are fatalities. As a result of these casualties, over 450,000 mandays are lost annually. This alarming figure is equivalent to an annual loss of over 1,700 manyears. The associated costs of insurance, payroll compensation, claims, law suits, and direct injury costs have been estimated by some railroads to average nearly $400 per lost work day. Using this figure, employee casualties cost the industry over $176 million annually. This estimate would be much higher if all hidden costs, such as those associated with maintaining productivity, could be accurately quantified.

The majority of these injuries are not associated with train accidents as discussed earlier. Therefore, research on employee safety must consider factors other than the causes of train accidents if they are to have a significant impact on employee injuries.

ON-DUTY EMPLOYEE CASUALTIES 1975-1978



INJURIES	56,305	(AVG. ANNUAL)
FATALITIES	111	
LOST DAYS	452,714	

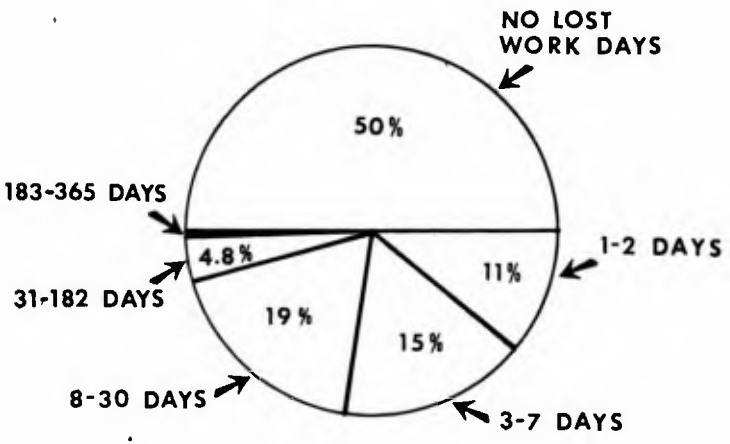
FIGURE 12

Interestingly, the majority (50 percent) of the reported injuries do not involve lost work days (Figure 13). Nevertheless, the cost in terms of human suffering is significant. Over 40 percent of all injuries which result in lost work days are sprains and strains. The majority of these involve the torso, leg, or foot. And, 50 percent of all injuries involving lost work days require more than seven days of recovery before the employee returns to work.

The overall frequency and severity rates may be increasing. Figure 14 shows that the number of injuries per million manhour and the number of lost work days per million man hour have increased by 64 and 29 percent, respectively, since 1975. However, industry officials believe that a large percentage of this increase is due to improvement in reporting. Until 1975, under Federal requirements, reports were filed in each case of fatality or injury involving more than one lost work day. Starting in 1975, loss of time of a day or a medical treatment were established as the minimum threshold for reporting. Thus, a certain amount of time was required for the industry to "learn" the new reporting requirements, change record-keeping procedures, and begin to file accurate counts of casualties. It is important to note that this change in reporting requirements doubled the number of cases being reported.

The most critical craft categories were identified by use of a frequency/severity index. Road trainmen were identified as the most critical craft, followed by yardmen, trackmen,

PERCENTAGE OF INJURIES BY LOST WORK DAYS



ON-DUTY EMPLOYEES, CLASS I & II
RAILROADS, COMBINED YEARS 75-78

FIGURE 13

TRENDS 75-78

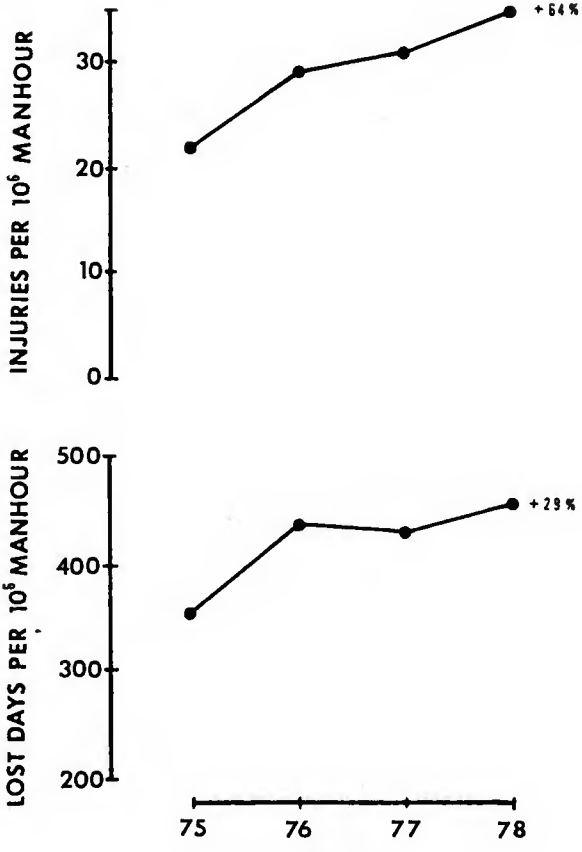


FIGURE 14

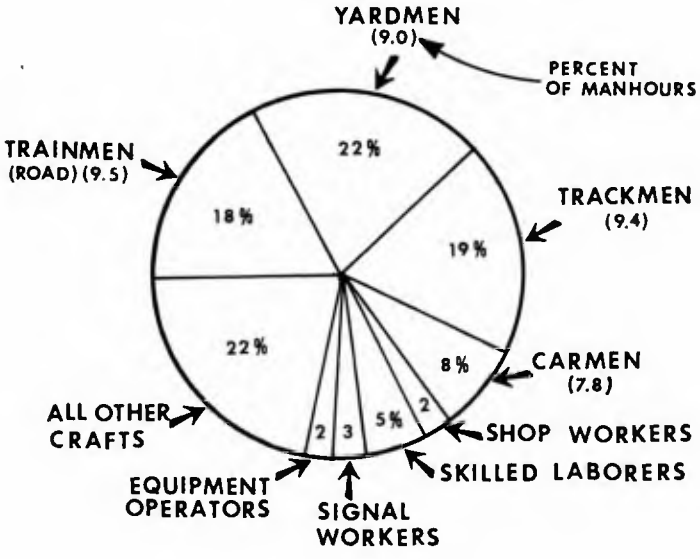
A-22

carmen, shop workers, skilled laborers, signal workers, and equipment operators. Figure 15 shows the percentage of injuries associated with each of these crafts. Trainmen accounted for 18 percent of the injuries but only 9.5 percent of the manhours. Yardmen accounted for 22 percent of the injuries but only 9 percent of the manhours. Trackmen accounted for 19 percent of the injuries but only 9.4 percent of the manhours. Carmen accounted for 8 percent of the injuries and 7.8 percent of the manhours. These four crafts also accounted for over 65 percent of the lost work days.

Figure 16 shows that the injury rate trends for yardmen and road trainmen have not changed significantly since 1975. However, the injury rate trends for trackmen and carmen have increased significantly since 1975. The injury rate for trackmen increased by 92 percent. The injury rate for carmen increased by 67 percent. It unknown what portion of this increase is due to improved reporting.

The most critical cause categories were identified by use of a frequency/severity index. Stumbled, slipped, tripped or fell was identified as the most critical cause category. This was followed by use of tools, handling material, getting on and off equipment, striking or struck by equipment structures or material, coupling or uncoupling, handling ties, operating switches, struck by flying or falling objects, operating hand brakes, slack action, and motor vehicle accidents. Figure 17 shows the percentage of injuries for each of these cause categories. Note that the top four cause categories accounted

MOST CRITICAL CRAFTS



PERCENT OF INJURIES

FIGURE 15

A-24

INJURY RATE TRENDS 75-78

(BY CRAFT)

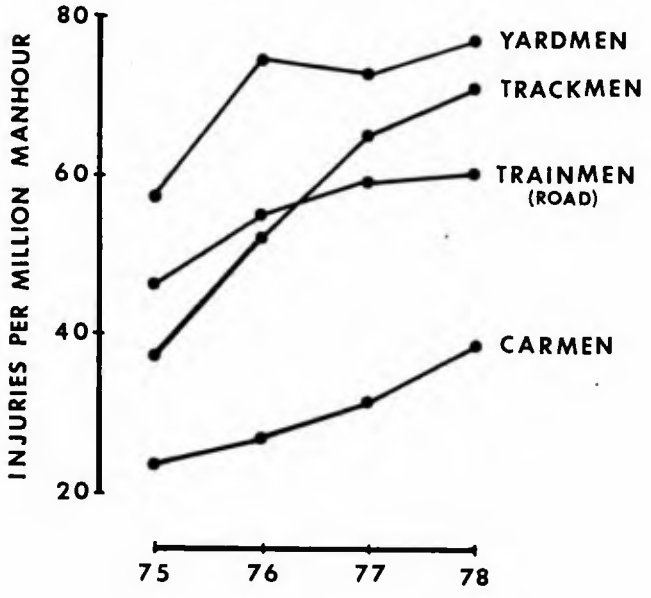
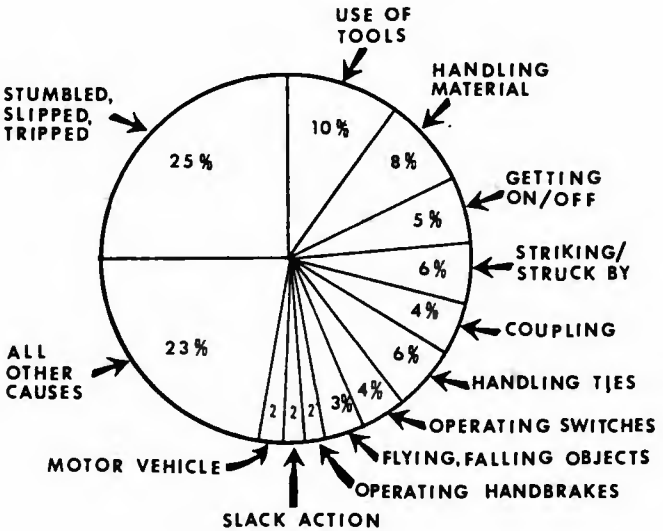


FIGURE 16

A-25

MOST CRITICAL CAUSES



PERCENT OF INJURIES

FIGURE 17

A-26

for nearly 50 percent of all injuries. They also accounted for nearly 50 percent of all lost work days.

Figure 18 shows the injury rate trends for the four most critical cause categories. The category, stumbled, slipped, tripped or fell, had a 70 percent increase in the number of injuries per million manhour since 1975. Again, it is unknown what portion of this increase is due to improved reporting.

Figure 19 presents a summary of the percentage of injuries associated with each of the occurrence codes which make up the cause categories. Some of the findings from this figure are listed below.

- Foreign objects or irregular surfaces were the most significant cause of stumbling and falling injuries.
- Hand tools accounted for 42 percent of the injuries associated with use of tools.
- Handling material by hand was the largest single cause of injuries associated with handling material.
- Losing footing was the most significant cause of injuries associated with getting on and off.
- There is a lack of detail in the cause category, striking or struck by equipment structures or material. Fifty-three percent of the cases werecoded as striking or struck by equipment structures or material.
- Adjusting coupler was the largest single cause of injuries associated with coupling or uncoupling.
- Inserting or removing ties using hand tools was the largest single cause of injuries associated with handling ties.

INJURY RATE TRENDS 75-78

(BY CAUSE)

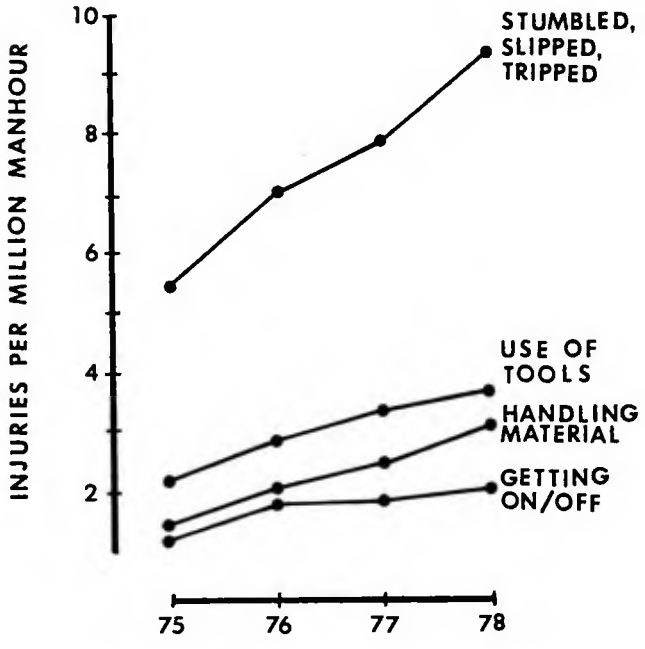


FIGURE 18

A-28

OCCURRENCE CODES BY CAUSE CATEGORY

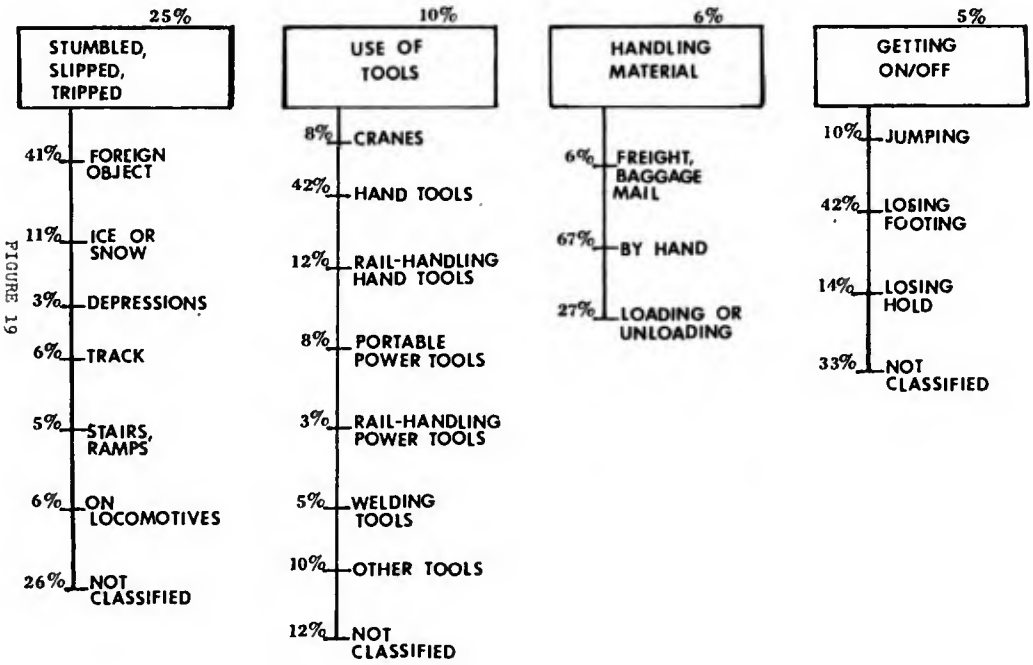


FIGURE 19
A-29

66-493 O—80—11

OCCURRENCE CODES BY CAUSE CATEGORY

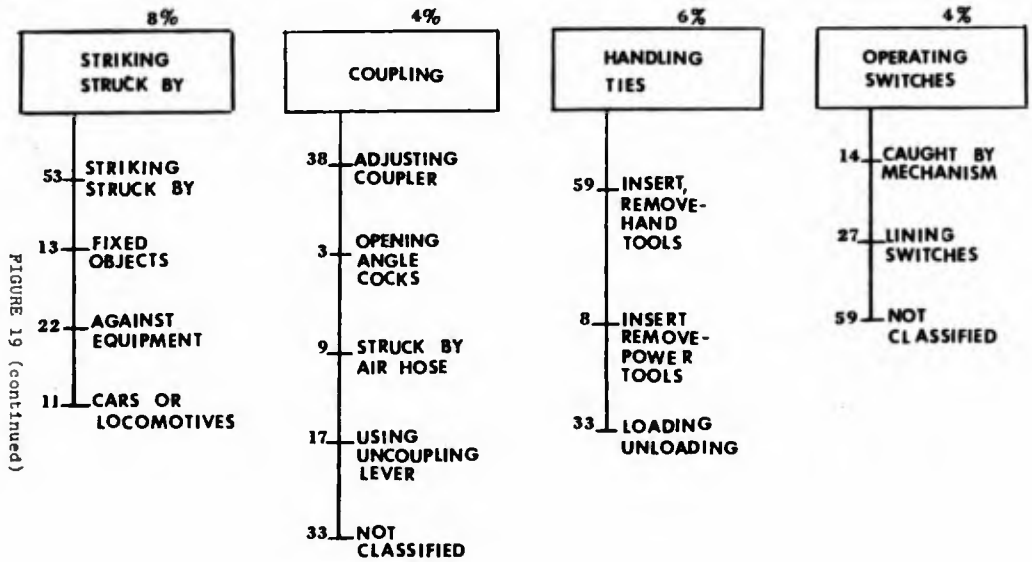


FIGURE 19 (continued)

A-30

FIGURE 19 (continued)

A-31

- Lining switches was the largest single cause of injuries associated with operating switches. However, 59 percent of the cases in this category were not classified by use of a specific occurrence code.
- Slack action in the caboose was the largest single cause of injuries associated with slack action. However, 54 percent of the injuries in this category were not classified by use of a specific occurrence code.
- Losing hold was the largest single cause of injuries associated with operating hand brakes. However, 77 percent of the injuries in this category were not classified by use of a specific occurrence code having to do with the operation of hand brakes.

Note that in many of the cause categories identified above, a large percentage of the cases were coded as not classified. This suggests that there is either a lack of appropriate occurrence codes to describe the occurrence or the individuals who are coding the injuries are not using the existing occurrence codes properly or there may be a combination of these two problems.

Table 3 shows the percentage of all injuries by cause and craft categories. From previous figures we know that carmen accounted for 8 percent of all injuries. This table shows that stumbled, slipped, tripped and fell, use of tools, and handling material are the most significant causes of injuries to carmen; and these causes account for 4.3 percent of all injuries. Road trainmen accounted for 18 percent of all injuries. The most

TABLE 3

MAJOR PROBLEM AREAS

(PERCENT OF INJURIES)

	CARMEN	ROAD TRAINMEN	YARDMEN	TRACKMEN
STUMBLE SLIPPED	1.7%	5.4%	7.2%	2.1%
USE OF TOOLS	1.6%	- - -	- - -	4.5%
HANDLING MATERIAL	1.0%	- - -	- - -	2.4%
SLACK ACTION	- - -	1.3%	- - -	- - -
COUPLING UNCOUPLING	- - -	1.2%	2.9%	- - -
GETTING ON/OFF	- - -	1.7%	1.9%	- - -
OPERATING HANDBRAKES	- - -	- - -	1.0%	- - -
OPERATING SWITCHES	- - -	1.4%	2.3%	- - -
HANDLING TIES	- - -	- - -	- - -	5.2%
PERCENT OF ALL INJURIES	4.3%	11.0%	15.3%	14.2%

A-33

significant causes of injuries to road trainmen are stumbled, slipped, tripped and fell, slack action, coupling or uncoupling, getting on or off equipment, and operating switches. These cause categories accounted for 11 percent of all injuries. Yardmen accounted for 22 percent of all injuries. Stumbled, slipped, tripped or fell, coupling and uncoupling, getting on and off, operating hand brakes, and operating switches are the most significant injuries to yardmen. These cause categories account for 15.3 percent of all injuries.

This table also points out that the complete elimination of any one of the highest-ranked safety problems would improve overall rail safety by only a few percentage points.

Appendix B

TABLE 1

HIGHWAY-RAILROAD
MOTOR VEHICLE
CROSSING FATALITIES

YEAR		FATALITIES
1967		1,520
1968		1,448
1969		1,381
1970		1,362
1971	52%	1,267
1972	Decrease	1,190
1973		1,077
1974		1,128
1975		788
1976		978
1977		846
1978		929
1979		733 (preliminary)

SOURCE: FRA

TABLE 2

TRAIN MILES

YEAR		TRAIN MILES
1967		570,185,555
1968		551,868,142
1969		540,474,484
1970		519,885,696
1971	13%	499,026,329
1972	Decrease	511,399,208
1973		538,757,476
1974		534,039,763
1975		468,321,148
1976		491,057,525
1977		493,890,675
1978		497,134,000
1979		not available

SOURCE: AAR

TABLE 3

VEHICLE MILES

YEAR		VEHICLE MILES (MILLIONS)
1967		966,005
1968		1,019,726
1969		1,066,108
1970		1,114,098
1971	60%	1,183,524
1972	Increase	1,264,614
1973		1,316,207
1974		1,282,790
1975		1,330,074
1976		1,409,163
1977		1,466,000
1978		1,548,213 (preliminary)

SOURCE: FHWA

TABLE 4

POTENTIAL EXPOSURE AT
HIGHWAY-RAILROAD CROSSINGS

YEAR		EXPOSURE INDEX
1967		550.80
1968		562.75
1969		576.20
1970		579.20
1971	40%	590.20
1972	Increase	646.72
1973		709.11
1974		685.06
1975		622.90
1976		691.98
1977		724.04
1978		769.67

$$\text{EXPOSURE INDEX} = \frac{(\text{TRAIN MILES})\ (\text{VEHICLE MILES})}{10^{18}}$$

TABLE 5

MOTOR VEHICLE FATALITIES

YEAR		FATALITIES
1967		51,559
1968		53,831
1969		55,032
1970		53,672
1971	00%	53,761
1972	Decrease	55,704
1973		55,113
1974		46,078
1975		45,500
1976		46,434
1977		47,868
1978		51,500 (estimated)
1979		not available

SOURCE: FHWA

TABLE 6

HIGHWAY-RAILROAD CROSSING ACTIVE WARNING DEVICES SINCE 1966 USING FEDERAL AID HIGHWAY FUNDS

YEAR	NO. OF DEVICES INSTALLED #	NO. OF DEVICES IN PLACE
1967	294	47,184
1968	278	47,462
1969	221	47,683
1970	187	47,870
1971	178	48,048
1972	224	48,272
1973	165	48,437
1974	275	48,712
1975	211	48,923
1976	365	49,288 *
1977	688	49,976
1978	984	50,960
1979	988	51,948

#SOURCE: FHWA

*1976 TOTAL FROM THE NATIONAL HIGHWAY-RAILROAD CROSSING INVENTORY

FIGURE 1

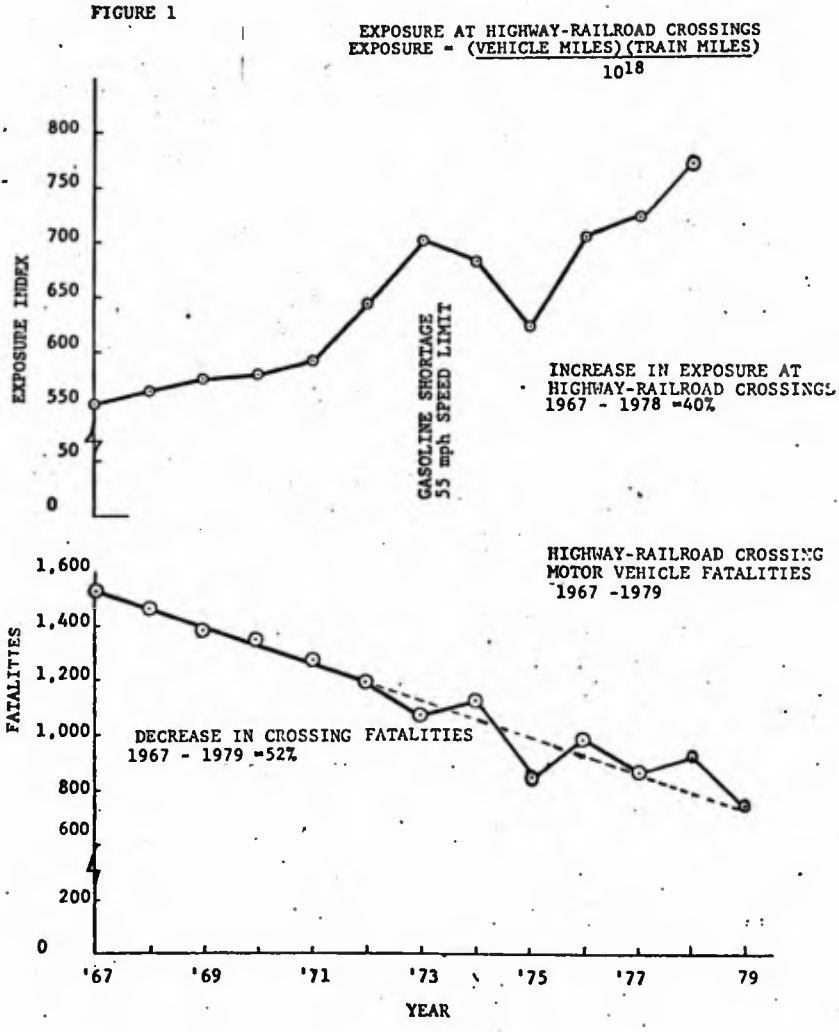

EXPOSURE AT HIGHWAY-RAILROAD CROSSINGS
EXPOSURE = (VEHICLE MILES)(TRAIN MILES) / 10^18
EXPOSURE INDEX
800
750
700
650
600
550
50
0
GASOLINE SHORTAGE
55 mph SPEED LIMIT
INCREASE IN EXPOSURE AT HIGHWAY-RAILROAD CROSSINGS 1967 - 1978 =40%
HIGHWAY-RAILROAD CROSSING MOTOR VEHICLE FATALITIES 1967 -1979
FATALITIES
1,600
1,400
1,200
1,000
800
600
200
0
DECREASE IN CROSSING FATALITIES 1967 - 1979 =52%
'67
'69
'71
'73
'75
'77
79
YEAR

FIGURE 2

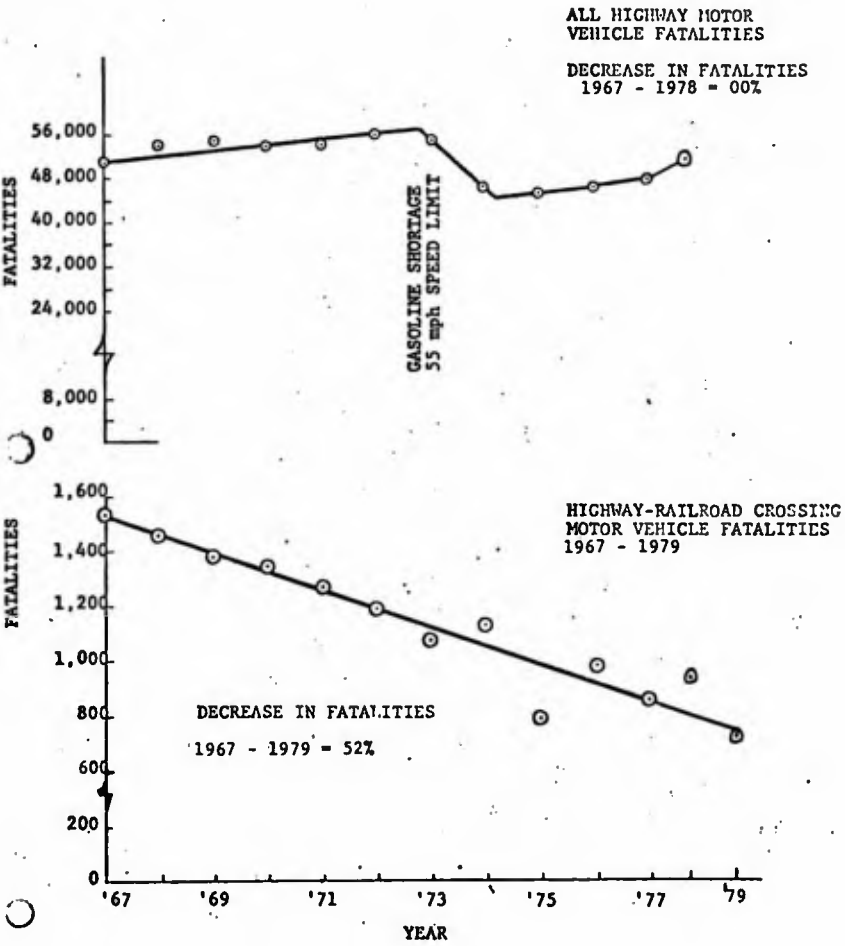
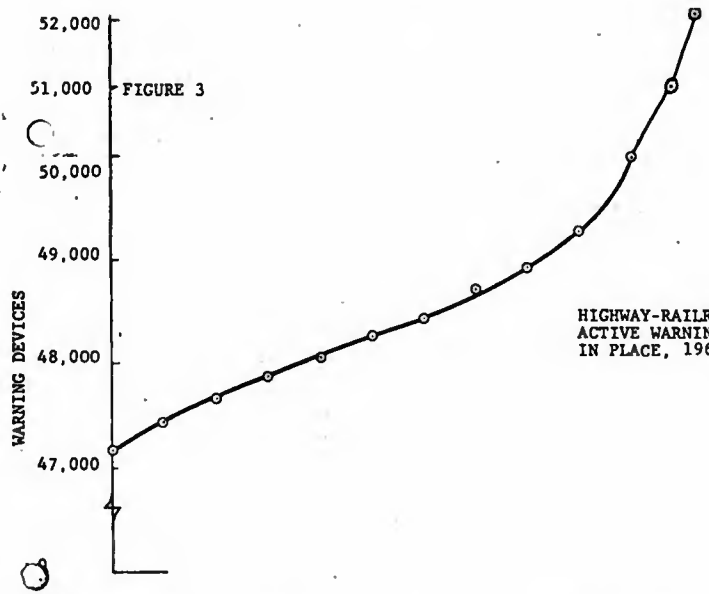
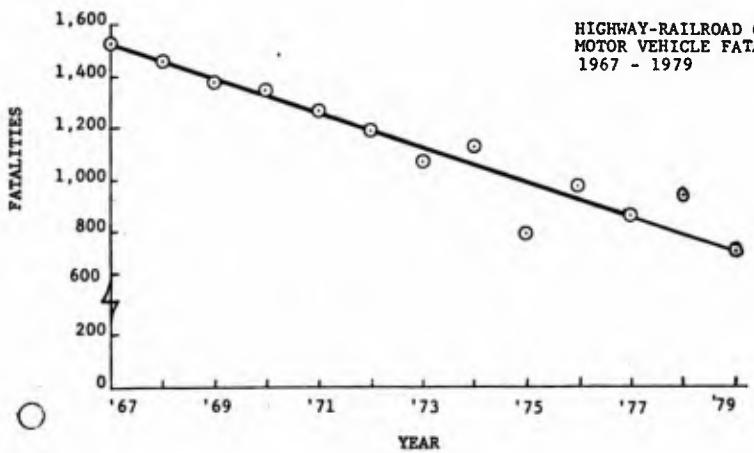

ALL HIGHWAY MOTOR VEHICLE FATALITIES
DECREASE IN FATALITIES 1967 - 1978 = 00%
FATALITIES
56,000
48,000
40,000
32,000
24,000
8,000
0
GASOLINE SHORTAGE 55 mph SPEED LIMIT
HIGHWAY-RAILROAD CROSSING MOTOR VEHICLE FATALITIES 1967 - 1979
FATALITIES
1,600
1,400
1,200
1,000
800
600
200
0
DECREASE IN FATALITIES
1967 - 1979 = 52%
'67
'69
'71
'73
'75
'77
'79
YEAR

FIGURE 3



HIGHWAY-RAILROAD CROSSING
ACTIVE WARNING DEVICES
IN PLACE, 1967 -1979



HIGHWAY-RAILROAD CROSSING
MOTOR VEHICLE FATALITIES,
1967 - 1979

Mr. MATSUI. I appreciate hearing from you very much. One of the issues that has come up, both by Mr. Sullivan and Mr. King, is the issue of drinking. What are your thoughts on that and what recommendations does the industry have in that respect?

Mr. DEMPSEY. I think we would like to reflect a bit on what has been said about that. I can say something in response to Mr. King's question. There is no rule more strenuously enforced in the industry, to my knowledge, than rule G, the drinking rule.

If the question is what happens to an employee caught in flagrante delicto on that rule, he is finished. He may be eligible for an alcoholic rehabilitation program on those railroads that have that sort of program, but this is not a violation winked at by the railroads.

Mr. MATSUI. Is that an industry standard?

Mr. DEMPSEY. Yes.

Mr. MATSUI. In other words, all of the railroads enforce that?

Mr. DEMPSEY. Yes; we do not have, to my knowledge, and I will ask Mr. Johnson to correct and expand on what I say because it is his area, but we do not have, to my knowledge, the kind of rule Mr. King is talking about, that is, a rule which prohibits drinking for a prescribed period before the train departs.

As I say, I think we would want to reflect on that part of his testimony.

Mr. JOHNSTON. Yes, that is correct, Mr. Dempsey and Mr. Matsui. When an employee is subject to call, he is prohibited from indulging.

Mr. MATSUI. He is prohibited at that time?

Mr. JOHNSTON. Yes. I might add that the FRA is also concerned, along with labor, as well as management, with the drinking problem in our industry. As a result of that, labor has been very helpful, along with the FRA, and presently there is an ongoing program and a study involving seven roads who volunteered, incidentally, to participate in this study of the alcohol problem.

I am pleased to report that on April 15, the railroad pesonnel, along with some other folks, are meeting on this subject, and I am sure that there is going to be tremendous cooperation from labor as well as the FRA in this area. We feel that the industry, along with labor, cannot lick the problem, if you will, but we can certainly alleviate the drinking problem that the industry now experiences.

Mr. MATSUI. Earlier during Mr. Sullivan's testimony, there was some discussion regarding statistical information that resulted in the conclusion that railroads that are in poor financial condition are the ones which have a greater incidence of accidents. Do you have a comment on that?

Mr. DEMPSEY. Yes, I do, as a matter of fact. What he says is certainly true, and the data confirms only what one would expect. As maintenance goes down, as track is not maintained at the highest standard, the likelihood of a derailment and equipment failure increases.

But I think there is another aspect to this which one must not overlook, and that is this. The railroads perfectly well know that that is the condition they are in. Accordingly, they compensate in the same way you would compensate if you were running a fleet of

trucks with tires which were well worn. You would order that they go at lower speed.

The consequence would be on the rails exactly what it is on the highway. That is, you would have more blowouts, more derailments and equipment failures, but they would be less serious. So if one looks to data that relates to casualties, injuries, loss of life and limb, and that sort of thing, you will see there is no significant difference.

Bill, you are much more familiar with this area than I, but we went into these at some length in dealing with the hazardous material transportation problems.

Mr. HARRIS. Yes. The problem in the railroad accident field is that an accident can be really quite different from another accident. And accordingly, one must examine carefully what the consequence of those accidents are in terms of release of hazardous materials.

I think the record here is not quite as clear, but this is another example of the kind of problem you can get into with the regulatory approach to an issue. If, in fact, you equate all accidents as having the same implication, then you may, in fact, cause railroads and inspector activities to direct attention toward the all-accident problem rather than to the selective important accident problem.

So I think that one has to look with great care on a conclusion in this area, and we will be happy to work with FRA and others in insuring that the issue is given proper but not overwhelming attention.

Mr. MATSUI. Are you saying, and perhaps you cannot respond to this question, that if you just take those accidents which are serious from an injury point of view and those accidents which are serious from a property point of view, there is no difference from a statistical point of view between the financially secure railroad and a financially insecure railroad? Have you drawn that conclusion from the statistical studies that the FRA has presented you with?

Mr. HARRIS. I would like to suggest that the issue of accident frequency and accident severity is not a simple financial issue.

Mr. MATSUI. I understand that.

Mr. HARRIS. We are in the process of studying with a number of railroads, as a result of cooperative work we did with the shippers and railroads, areas of the country and routes that appear to have different safety performance to see whether or not we can identify those practices which will improve safety, including additional expenditures of funds.

That study, we think, will be revealing and will be extremely helpful in clarifying the problem and the issue under consideration.

Mr. MATSUI. Maybe I didn't make my question clear, because I didn't hear an answer to it. If we got rid of the $2,900 and that threshold limit, and got rid of those accidents and considered only the serious accidents from a personal injury or property point of view, is there a correlation between high incidence of those kinds of accidents and a financial condition of the railroad, or is there not?

Mr. HARRIS. There is a lower correlation, and we are trying to establish now what the real issues for correlation are.

Mr. MATUSI. I understand. In other words, there is a correlation between that but it is a lower correlation than if you include all of the accident. Is that what you are saying?

Mr. HARRIS. I guess I have to say I would have to reexamine the data on that point. We are looking now at all of the issues that affect the serious accidents, trying to be sure we are not overtaken by the correlation which exists between numbers of accidents and financial condition.

Mr. MATSUI. If I understand you, you are saying you don't know because you haven't examined it from that perspective.

Mr. HARRIS. We haven't examined the whole process from that perspective, that is correct.

Mr. DEMPSEY. We will look at what we have, and if we have something that will be helpful to you, we will supply it to you.

Mr. MATSUI. Thank you. I yield back to the chairman.

Mr. FLORIO [presiding]. The audience may be interested in the fact that a rule was authorized for the Northeast Corridor Rock Island legislation scheduled for House consideration on Thursday.

Mr. MADIGAN. I have no questions, Mr. Chairman.

Mr. FLORIO. I have just one question. I apologize for not being here to hear your testimony, although I have read it.

One of the points which has been brought to our attention deals with the relationship of employees and their ability to work in the furtherance of safe conditions. I am sure all are in favor of safe railroad conditions. As you heard the comments this morning, this committee is inclined to want to encourage the States to play a more important role, and the Federal Government, certainly, to play a more important role. And I know the rail industry itself has an interest in getting as many people involved as possible.

The suggestion has been made that employees from time to time, when they play a part in the process in terms of reporting violations, somehow have their status jeopardized. Now, I am sure that that is not the case across the industry, but is it not in the interest of the industry to have their full complement of personnel, not only the inspectors but also the operating people, out actively looking for problems associated with the railroad; and therefore, shouldn't we be providing some insulation, protection or encouragement to employees to be providing information that they have direct access to?

Mr. DEMPSEY. Let me agree, first of all, with the basic point. That is to say, I think the railroads with the best safety programs and best safety records would agree with you entirely, that one essential ingredient is to enlist the cooperation of their employees, particularly through their union representatives as part of their safety programs.

The next question is: What about employees who report defects? I think that the ordinary reaction of the railroad would be, OK, fine, but first come to us so that if you have a situation in which an employee is venting his resentment against the railroad by going to the governmental authority before he goes to the railroad, you have a bad situation. It is not good in terms of safety and it is not good in terms of employee labor-management on the railroad. That sometimes happens.

It also sometimes happens, I am sure, although I don't know of a particular case, that an employee comes to a supervisor with a legitimate complaint and the supervisor thumbs his nose at him. I just think that has to happen in every industry from time to time and that is unfortunate.

Now, what is proposed here is in terms of protection. The anti-whistle-blowing provision for the employee who does do the right thing is not in principle something that, it seems to me, one takes exception to. The point I make about it is under existing law, under our existing grievance machinery and the case law that has built up under it, that employee does have protection.

If he is suspended, disciplined, or discharged for that reason, he wins his case. So my point is simply that, as I said to Mr. Matsui just before you came in, Mr. Chairman, we really need less regulation and less Federal intervention in this industry rather than more.

So we just object in principle to something which is redundant.

Mr. Harris.

Mr. HARRIS. There are some specific cases in research where we have had what I consider to be highly successful cooperative programs involving labor in the study of specific safety issues. For example, with regard to the locomotive cab, we became aware of some accidents and the FRA called a conference so as to have labor, the producers, the manufacturers and the railroads consider the problem.

As a result, a committee was established which first collected information on the nature of those incidents and then studied what the possible solutions were, and cooperatively agreed on important design changes in the locomotive cab, which are now enforced by the industry and are incorporated in every new locomotive cab.

The committee has done the same with the locomotive cab seat. They have put that out on a dozen railroads and have dozens of employees ride their route on the improved seat to get their views on the condition of the seat. We are now putting forth a seat specification based on that work.

Mr. FLORIO. I appreciate that. I suppose what we are talking about are the worst case situations, as Mr. Dempsey indicated, that when an employee does report a complaint to a middle management person who may not be as responsive as he could be and then finds the need, finding no response, to go beyond that, shouldn't there be some minimum degree of protection for that employee for doing what he really should be doing? That is the question.

Mr. DEMPSEY. As I say, we will supply some of the arbitration awards to the committee. He is protected under existing law. He should be and is.

Mr. FLORIO. The point has been made relevant by some court decisions recently. If, in fact, an employee sees a hazardous condition and refuses to become involved in an operating situation, what should be his right with regard to termination or being penalized?

There has been a Supreme Court case recently, as I am sure you are aware, and it may very well be this legislation should address the rights as spelled out by the Supreme Court in that type of situation.

Mr. DEMPSEY. I hope in your consideration of that you will look at the conditions peculiar to the railroad industry. We were discussing this a while ago. If you take a Whirlpool plant or any kind of stationary facility like that, you have a different situation than you do with the operating employees out in the yard.

What happens when we have a sleetstorm? We cannot shut down operations. It is the Federal policy that operation of the rails continue. What happens if the yardman says to the foreman: "There are cars rattling all over this yard and I may slip; that is a dangerous condition." Is that an unreasonable position or not? We are at great risk.

Now, this legislation goes beyond that and says that that employee not only is protected against being disciplined in the proposed legislation if he refuses to work in weather conditions which are less than happy, but he can request reassignment.

Now, what happens when that yardman comes to the foreman and to the supervisor and says: "I want to be reassigned." Where do you reassign him? There is no place to reassign him to. In those circumstances, he and others can walk off the job. That, to me, is a license for a wildcat strike.

I make the point, and I make it seriously, that this is provided by Federal law, this kind of gun to put at management's head without the discipline of a union. Unions do not usually call wildcat strikes. Of course, we have some, and when they happen there has been a terrible misunderstanding, because our unions do not do that, by and large.

As I said before, and I will repeat it again, I don't think most of our employees would do it. I think the vast majority of our employees would act in a responsible way because they are responsible people, good employees who are loyal to their industry. But obviously, that cannot be said of every employee, and we do have some hot spots develop from time to time in which the unions cannot control their men.

They cannot control their men. They want to and they try, but they cannot. And what this does is give the Federal imprimatur to those employees on those hot spots to walk off the job on any kind of a condition anyone could conceivably say would be unsafe or dangerous.

That is our problem, and it is a serious one. After all, there is no Federal policy that requires the operation of the Whirlpool plant 24 hours a day, but there is an important Federal policy requiring the operation of the railroads. That is why we have the Railway Labor Act that doesn't permit strikes except after the most extraordinary exhaustion of circumstances, which Justice Black once said is almost interminable.

So we do have a different situation.

Mr. FLORIO. Thank you very much.

Mr. DEMPSEY. Thank you very much.

Mr. FLORIO. Our next witness is Mr. James Snyder, chairman of the safety committee, Railway Labor Executives Association.

Mr. Snyder, we appreciate your presence here today. We look forward to your testimony. Your statement will be entered into the record in its entirety.

You may feel free to proceed in a summary fashion. We would ask for the record you introduce your counsel and then feel free to go forward.

STATEMENT BY J. R. SNYDER, CHAIRMAN, SAFETY COMMITTEE, RAILWAY LABOR EXECUTIVES ASSOCIATION, ACCOMPANIED BY LAWRENCE M. MANN, COUNSEL

Mr. SNYDER. Thank you, Mr. Chairman, members of the committee and distinguished staff for the opportunity on behalf of the railroad brotherhoods to appear before your committee in reference to Rail Safety Authorization of 1980, and particularly H.R. 6497.

We appreciate the fact that the complete statement will be included in the record. In order to expedite time, I have with me here as counsel for the Railway Labor Executives Association, Mr. Larry Mann. Just briefly, Mr. Chairman, I will address some remarks as to the railroad employees' problems and some of the corrective action that we think is incorporated in H.R. 6497, which was introduced by Chairman Staggers.

First of all, it is my understanding there is no additional Federal funding in this particular legislation. Second of all, it would address itself to a very serious problem in cases, and we have witnessed cases, in areas where through some reason or another the FRA has failed to implement or enforce certain Federal statutes dealing with safety, as well as Federal regulations.

What we are suggesting to the committee in order to correct this is to permit action not by an employee but an organization, where the FRA fails to carry out the rules and regulations for the operation of a safe railroad. We think this is a fair approach.

It is, as I say, very important that some type of action be permitted in this area because it is my understanding, and Mr. Mann will address himself to some statutes that do address themselves to this area. The other protection is the so-called harassment section.

While I deeply respect the prior witness up here, Mr. Dempsey, and his judgment, I can assure you, Mr. Chairman, the Railway Labor Executives Association does not represent the type of employees as he has made an impression here on this committee, which, if given this type of authority, would close the railroad down in any type of weather by reporting unsafe violations out there.

We don't have that type of reputation. Sir, I would like for the record to remain straight on that. As I say, this has become increasingly a problem. This was brought before the committee 2 or 3 years ago, and I think, due to the time element and some other important things that took priority over this.

But since that time, since the last time it has been addressed before this committee, we have, particularly the organization I represent, the United Transportation Union, become more involved in the operation and the more hazardous safety conditions, and we are certainly in a position to know what is a safe operation and what is an unsafe operation.

Not all railroads are guilty of this, but we do have problems with some railroads where the employees are attempting to have a safe operation out there and are attempting and do report these viola-

tions, whether on the State or Federal level, and they are being harassed for it.

Maybe in the very near future after that they are discharged or reprimanded for some rule violation. You can always find a rule violation of employees out there because you cannot operate the railroads out there by the operating rules of the railroad. It has been tried. I have witnessed it personally myself.

So out of a lot of the operating rules out there, they can always find some violation of an operating rule to discharge a member. This is the way they do it—not directly because he has reported an unsafe track condition or unsafe equipment or unsafe operation of hazardous materials or things of that type.

So, as I say, we have it increasingly not only in the UTU. We have it in the other crafts, such as the carmen's organization, which is continually reporting cases to me throughout the country, as well as the engineers' group. So these are things we are very much concerned about which we think should be corrected, where an employee is making every effort to cooperate with management and everyone to have a safe railroad. They shouldn't be harassed for doing so.

Employment under unsafe conditions, as referred to as the *Whirlpool* case here, I will let Mr. Mann address himself to. But before I do, the other provisions of the bill we are concerned about are, of course, naturally, the provision relating to the pay classification.

Mr. Dempsey did agree to two sections of the bill, and that is the pay classification and putting a freeze for the Federal inspector, and the other one is transportation to lodge facilities.

This is an amendment to the Hours in Service Act. Simply, we thought we had things pretty well laid to rest on the *Hours of Service* case, but this is a very common practice throughout the country, where a crew, after they are properly relieved, say after 12 hours in service, but they are out in between terminals and there are no facilities out there. They are properly relieved but they have to wait for transportation to come and bring them to their designated terminal where lodging and meals are available.

Now, this can run up. We have had cases running up 4 and 5 hours where they are stranded out there. Now, while Mr. Dempsey would oppose any change in this or any improvement in this particular section, because certainly it costs the carriers additional money, and this would be a savings to the industry here by expediting, we are not saying what kind of transportation because that is a collective bargaining issue.

But we are saying in order to get into the terminal to get adequate rest, they not be left out in the boondocks someplace.

These pretty well address the provisions of the bill which we think the railroad employees should be brought up to date on.

With your permission, I will ask Mr. Mann to address himself to the court cases here.

Mr. MANN. Mr. Chairman, really I just want to point out two areas briefly for you to consider. One is that Mr. Dempsey for the AAR seems to have left the impression that we are seeking something completely unique in legislation, one with respect to seeking the private right of action, and two, the protection for harassment.

We are not seeking anything new. What we are asking for is simply what has already been addressed by Congress on many occasions: for example, the private rights of action. They are in a number of health and safety field statutes, the Occupational Safety and Health Act, the Toxic Substances Act, the Clean Air Act, Noise Control Act, Surface Mining Control and Reclamation Act, the Safe Drinking Water Act.

These are all acts which permit a private right of action where there has been a failure, for whatever reason, to enforce the laws properly and adequately. The only distinction between these statutes which I have just listed is in the OSHA statute it is worded differently. It is more of a mandamus-type proceeding. We are not seeking that kind of legislation here. We are seeking more of the type in the others I have listed.

Now, with respect to an employee's right where he is faced with an imminent hazard to his health or safety, Congress addressed that issue in the OSHA law, and the Supreme Court, in the Whirlpool Corp. case, which was just decided in February of this year, held, in effect, that an employee has a right to choose not to perform his assigned task because of a reasonable apprehension of death or serious injury, coupled with a reasonable belief that a less drastic alternative is available.

Now, if you analyze H.R. 6497, it is not asking for a thing any different from what this court decision held an employee has a right to do. Now, the question might be asked, well, if that is the right nationwide, why do you need legislation?

We haven't really analyzed the full implications of the Whirlpool Case as it relates to a railroad employee; however, I might just bring you up with some background. Several years ago the railroad industry took a very strong position that the rail workers were not covered under OSHA.

It forced the rail workers to initiate litigation around the country. Finally it was resolved that the railroad workers are indeed covered under OSHA, where another agency such as the Federal Railroad Administration has not exercised its jurisdiction.

Now, there is a demarcation. There are some areas where the FRA has not exercised its jurisdiction. That begs the question. If you can bring in the Whirlpool case, what can the railroad employee do or not do.

We submit that we should not be forced to go to the courts now and spend thousands of dollars in litigation fees to determine whether or not we come under *Whirlpool,* when Congress can simply address it without that problem. There is no reason why we should not get the same rights as every other industrial worker in this country concerning safety.

[Testimony resumes on p. 194.]

[Mr. Snyder's prepared statement follows:]

March 25, 1980

STATEMENT OF MR. J. R. SNYDER ON BEHALF OF THE RAILWAY LABOR EXECUTIVES ASSOCIATION BEFORE THE HOUSE SUB-COMMITTEE ON TRANSPORTATION AND COMMERCE ON H.R. 6497, THE FEDERAL RAILROAD SAFETY AUTHORIZATION ACT OF 1980 AND RAILROAD SAFETY AMENDMENTS

Mr. Chairman, members of Subcommittee: My name is J. R. Snyder. I am the National Legislative Director of the United Transportation Union. I am appearing today as Chairman of the Safety Committee of the Railway Labor Executives Association-- RLEA. Accompanying me are Lawrence M. Mann, attorney for RLEA in this matter, and Marshall Sage, Research Director for UTU. The RLEA represents 100% of the railroad workers in this country, and the names of the constituent organizations are as follows:

American Railway Supervisors Association

American Train Dispatchers Association

Brotherhood of Locomotive Engineers

Brotherhood of Maintenance of Way Employees

Brotherhood of Railroad Signalmen of America

Brotherhood of Railway, Airline and Steamship Clerks, Freight Handlers, Express and Station Employees

Brotherhood of Railway Carmen of the United States and Canada

Hotel & Restaurant Employees and Bartenders International Union

International Association of Machinists and Aerospace Workers

International Brotherhood of Boilermakers, Iron Shipbuilders, Blacksmiths, Forgers, and Helpers

International Brotherhood of Electrical Workers

International Brotherhood of Firemen and Oilers

International Organization of Masters, Mates and Pilots of America

National Marine Engineers' Beneficial Association

Railroad Yardmasters of America

Railway Employees' Department, AFL-CIO

Seafarers' International Union of North America

United Transportation Union

We appreciate this opportunity to appear before your Committee once again to voice rail labor's views on the proposed authorization of the Federal Railroad Administration during fiscal years 1981 and 1982 as well as to discuss some very important rail safety proposals.

It is unnecessary for us to go into great detail concerning the poor safety record of the nation's railroads. As you know accidents, injuries, and deaths have been at a totally unacceptable level for too many years. Nearly every day we read about derailments as well as tank cars rupturing. Many of the tank cars contain hazardous materials and whole sections of towns have had to be evacuated. Some unfortunately result in catastrophies. There were 832 cars transporting hazardous materials that were damaged in railroad accidents from January - September, 1979. Over 14,000 people had been evacuated as a result of hazardous material accidents. These figures, although very alarming, are predictably following

a trend of worsening safety conditions on the railroads over the years. Also in 1979, hazardous materials penalties were assessed at 167% above fiscal year 1978, which was itself a record year.

Based upon the latest published data, for the first nine months of 1979 there were 57,010 fatalities and injuries in railroad accidents/incidents, up 1,651 from the same period the preceeding year. Even though the reporting threshhold was $600 higher in 1979 than in 1978, reportable damage to property caused by accidents during the first nine months of 1979 totaled $233,554,550, which was over $9 million greater than during the previous year. Of the 7,449 collisions, derailments and other accidents which occurred through September, 1979, 4561 were caused by defective track and equipment.

Whereas in 1975, there were about 74 casualties per million train miles, by 1976 there were 86 and in only 2 more years that figure was up to over 98 casualties per million train miles. The same holds true for reportable damage. The past year up to present has brought some of the worst, and most potentially dangerous accidents of all. Here are some specific examples of railroad accidents during this past year.

1. On January 13 of this year 750 persons were forced from their homes in Millfield, Ohio, when a ConRail freight train derailed, spilling a flammable, toxic chemical.

2. In early 1979 a tank car filled with toxic chemicals on the Illinois Central Gulf ruptured in Bedford Park near Chicago. Fumes sent seven persons to hospitals and chased several hundred others from the area.

3. Another 1,000 persons in Chilicothe, Ohio were forced to leave a 5 block area when poisonous fumes began leaking from a derailed tank car. Incidentally, in 1978 10% of all railroad accidents toook place in the state of Illinois.

4. 500 residents of Sunset Bay, New York were chased out of their homes when 21 cars of a ConRail freight train, including two tankers with the chemical explosive vinyl chloride derailed.

5. 17 cars of an Illinois Central Gulf train derailed at Fledge, Mississippi, smashing into propane storage tanks located near the tracks. The town's 600 residents had to be evacuated.

The number of inspections of equipment and the number found defective further highlight the chronic safety problem. Every year since 1968 the percentage of safety appliances found defective by FRA inspectors has increased. Our best information indicates that whereas in 1978 16.7% of the safety appliances inspected by FRA safety inspectors were defective, in 1979 approximately 18.5% were defective. In 1978, 12% of the freight cars were found defective; in 1979 about 15% were found defective.

One area of safety about which your Committee should be aware is in FRA's rulemaking. The FRA has already issued, or is in the process of making wholesale revisions of all of its major safety standards. These include freight car, track, signal systems, locomotives and operating practices. At this time I will not attempt to review the specifics of each of the rulemakings. However, if any of you are interested, we would be happy to provide your subcommittee with details of what is occurring. If the new safety revisions are any indication of FRA's plans for the future, the regulations for railroad safety enforcement are well on the way to becoming virtually meaningless.

The obvious question is how can Congress cause an improvement. We recognize the financial burdens of some railroads may be a factor in the poor safety record. However, we feel a significant improvement could be attained simply by adequate enforcement of the existing laws and regulations. As we have told you before, we do not think FRA is doing its job.

FRA persistently has failed to hire the safety inspectors authorized by Congress. At the close of 1979, although Congress had authorized 429 federal and state inspectors, FRA had only 372 on board. In 1979, Congress had authorized six trainees; FRA had hired none. Congressional committees have long recognized this. In 1978, nine members of the House Committee on Interstate and Foreign Commerce submitted their "Separate

views on FRA's lack of attention to railroad safety" as part of the Committee's report on the Rail Safety Authorization Bill. The members of the Committee summarized their conclusions as follows:

> As these reports indicate FRA's failure to enforce the federal railroad safety laws has been paralleled by an alarming increase in rail accidents.

H.R. Rep. No. 1176 on H.R. 12577, 95th Cong., 2nd. Sess., at pp. 16-20 (1978).

The legislative history of the Federal Railroad Safety Authorization Act of 1976 also explicitly recognizes that FRA's enforcement of railroad safety laws has been inadequate.

> The Committee feels as is stated in its report on the legislation last year that statistics are telling the story that the Federal Railroad Administration (FRA) is not doing its job adequately. A major reason for this problem is that the FRA has consistently failed to avail itself of the safety inspectors and funds authorized by this Committee.
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> With responsibility for conducting the inspection activities for well over 300,000 miles of track, over one million freight cars and thousands of locomotive and passenger cars, it is obvious to the Committee that FRA should request adequate funds and higher sufficient numbers of inspectors to carry out that responsibility.

H.R. Rept. No. 1166 on H.R. Rept. 11804, 94th Cong. 2nd. Sess. 11-12 (1976)

H.R. 6497 does not propose an increase in the authorization for the previous two fiscal years. While we certainly think

more inspectors are justified we recognize that the appropriations would not be forthcoming without support from the FRA. Because your Committee only has an opportunity to learn what FRA is doing once every two years during hearings on authorization legislation, it is imperative at this time to be the catalyst to help assure FRA does the job Congress en-

The need for improved safety conditions is critical. That is why RLEA supports H.R. 6497, particularly certain of its special provisions which I shall now briefly address.

Section 3 - Private Right of Action

RLEA supports an amendment to the safety laws which would allow a private right of action to assure enforcement of railroad safety statutes.

At the present time, the only method of enforcing the railway safety statutes is by civil suits brought by the United States Attorney after investigation and the issuance of citations by the Federal Railroad Administration. There are approximately 300,000 miles of track, thousands of locomotives, over one million freight cars and numerous railroad terminals throughout the county. Notwithstanding increasing evidence of defects and violations, and notwithstanding the increasing incidence of derailments, and injuries, FRA has failed to avail itself of the authorized funds and inspectors it so badly needs and has in effect abandoned its enforcement powers. It is hard to believe but the fact is that to this

day, FRA has never sought an injunction against any railroad which its inspectors have found to be in violation of the safety statutes, no matter how bad or repetitive the violation. We recognize that FRA has utilized its emergency order powers on a limited number of occasions. However such order is not as effective as having an injunction issued with court sanctions available for violation of the injunction.

Recently, constituents of RLEA have forwarded literally hundreds of complaints to FRA of ConRail supervisors removing "bad order" tags (which indicate defects that could lead to derailments) rather than requiring the cars to be repaired. FRA took no action whatever, and RLEA was forced to file a lawsuit against them in federal court to stop the illegal acts. The private lawsuit was dismissed by the District Court because the rail safety statutes do not expressly provide for a private right of action. FRA adamantly refused to issue an injunction, and was satisfied merely by a verbal promise by a ConRail official that the railroad would halt its practice of sending cars out of the yard even though bad order tags had been placed on them. Throughout February and March of this year hundreds of examples of continued abuse kept streaming into FRA. I have attached as an exhibit to my testimony one of the statements dated Feruary 10th and forwarded to FRA on the 28th. That statement by a railroad employee shows that the foreman on the yard instructed the car inspector to inspect the ConRail train,

but not to, and I quote "carry brake bars, change any shoes, close any doors, or do other work which would require more time." those trains ran with worn out brakes. I have also attached as an exhibit to my testimony copies of pictures taken at the scene of a ConRail derailment in Millfield, Ohio which show that a derailed hazardous material tank car had a bad order ticket attached at the time of its derailment. FRA is satisfied with ConRail's verbal promise, even though FRA has massive evidence that the practice continues unchecked. When FRA unquestionably has knowledge of many safety defects of the kind leading to derailment and injuries, but chooses never to take effective enforcement action against the offending railroads and chooses never to use the injunctive authority granted to it by Congress, the employees whose lives and safety are so seriously threatened have absolutely no recourse but to file civil actions themselves to compel enforcement. We have singled out ConRail not because it is necessarily the worst offender of rail safety, but simply to show an example of what is happening.

Statutory private rights of action are not uncommon; in fact, they are frequently found in the health and safety field in such statutes as the Occupational Safety and Health Act (29 U.S.C. §662(d); Federal Water Pollution Control Act, 33 U.S.C. §1365; Clean Air Act (42 U.S.C. §7604); Clean Water Act (33 U.S.C. §1365); Toxic Substances Control Act (15 U.S.C. §2619); Safe Drinking Water Act (42 U.S.C. §300(j)(8); Noise

Control Act (42 U.S.C. §4911); and Surface Mining Control and Reclamation Act (30 U.S.C. §1270). Rail Safety, too, is an area where a private right of action is appropriate and necessary. A legislative solution is now critical particularly in light of FRA's failure of its enforcement obligations and also simply in the interests of protecting the public interest and promoting safety in all areas of railroad operations.

Section 4 - Protection and Rights of Employees

Needless to say, the railroad worker is employed in one of the most hazardous professions in this country. This work- is constantly faced with the very real potential of injury or death. The situation is, of course, worsened when the employees must work in and around equipment where there are known, yet uncorrected, safety violations. The most unacceptable working conditions are those where an employee is required to operate defective equipment or work in an area which present an imminent danger to his safety and health, where an employee brings this to the attention of the appropriate authorities and where retaliatory action is then taken against the employee. Our files are full of complaints over the years of harassment where a worker notifies authorities of violations, testifies in safety proceedings, or even institutes an action against a railroad. The harassment takes many forms: firing discipline, verbal abuse, disproportionate dangerous assignments, constant, unrelenting supervision, and so on. There is absolutely no ex-

cuse for such action by a railroad; yet it persists. For example, I have attached as an exhibit to my testimony a citation from Detroit Terminal Railroad Company commanding a railroad employee to appear at an investigation concerning that employee's, and I quote, "disloyal act of giving a signed statement to a representative of the FRA." RLEA has been advised that Detroit Terminal has been angered by the fact that FRA collected $8,000 in fines for defective car violations reported by this particular employee. On another occasion, discipline was taken by the Chessie System against an engineer, ostensibly for conducting an unauthorized federal inspection on locomotives. The records, however, make it perfectly clear that the man was disciplined for contacting an FRA inspector and for reporting numerous violations of previously operated locomotives. I am attaching as another exhibit background on this example of abuse. On some occasions the employees are forced to drive so far from their home terminal for the investigation they cannot get witnesses on their behalf. The employees, of course, must continue to point out the defects because the danger to them is real-- and increasing. Nothing short of statutory prohibition will be sufficient to protect workers from harassment, discharge or discrimination where an employee notifies the FRA of these kind of safety violations, files a proceeding resulting from alleged safety violations, refuses to operate defective equipment or refuses to work in an area where he

reasonably believes it presents an imminent danger to his safety and health. The Supreme Court in Whirlpool Corp. v. Marshall (48 U.S. Law Week 4189) recently upheld a provision in the OSHA regulations similar to what section 4 of H.R. 6497 provides. The Court said such a provision was in clear conformance with the fundamental objective of the OSHA Act-- to prevent occupational deaths and serious injuries. Safety is, of course, the basic underpinning of the rail safety statutes-- and RLEA strongly supports the proposed protections to railroad workers contained in section 4.

Section 5 - Collective Reemployment Rights

Prompted by a newspaper article a couple of years ago, the Department of Transportation has drafted proposed interpretations of their conflict of interest regulations which may require their employees to divest themselves of all forms of future employment rights they may have with railroads and companies in railroad-related industries. The National Transportation Safety Board has required divestiture. This will work considerable and unnecessary hardship on the affected employees in addition to having a deleterious effect on railroad safety enforcement. RLEA supports section 5 of the bill to allow retention of re-employment rights.

In the first place, it is ridiculous to suggest that there is any conflict of interest in federal employees maintaining seniority rights which were collectively bargained as an earned

benefit for prior service on a railroad. Those seniority rights are NOT a promise by the railroad of future employment with the railroad. They are merely an assurance that a prior employee who has enjoyed interim service somewhere other than the railroad will be given an opportunity to return to the rail road at no less a favorable position than when he left PROVIDED THAT he otherwise qualifies for employment. There is no room for impropriety, or even the appearance of impropriety, because the railroads are without power to deny seniority rights secured by collective bargaining. To the contrary, if the railroads had the discretion to hang seniority rights like a carrot on a stick before the government inspectors, then there could arguably be an opportunity for a conflict of interest. Futhermore, there is absolutely no evidence that there is now or that there ever has been a conflict of interest. The many years of dedicated service provided by federal employees who have retained seniority rights unequivocally negates that suggestion. Rather, it appears that the action of FRA and NTSB officials was merely a gross overreaction to the article and was simply not based on any reasonable assessment of the actual situtation. It is also interesting to note that virtually every former administrator of FRA and most former management level officials of FRA have accepted high positions in the railroad industry, yet FRA and NTSB have taken no action to eliminate the prospect of employment in the railroad industry-- and its accompanying

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conflict of interest-- of their non-Union officials. Similarly, the FRA and the NTSB investigate accidents involving military railroad cars moving on railroads and recommend safety regulations for military transportation. Many of their management and decisionmaking officials are members of military reserve units in situations far more likely to involve conflicts of interest than the situation of inspectors who are protected by their collective bargaining rights from railroad pressure. Yet, neither FRA nor NTSB has proposed a requirement to divest management level officials of their military connections.

Secondly, as I've mentioned, this movement by NTSB and others will have a considerable and damaging impact on railroad safety enforcement and, in fact, on railroad safety. Qualified railroad inspectors come virtually exclusively from the railroad industry. People with the requisite knowledge and experience are normally in their mid-career years, ages 40-52. By the same token, a newly hired federal employee will of course absorb the brunt of any reductions in force. In the event of a RIF then, at mid-career, if railroad seniority rights are not retained, those employees are on the street. Furthermore, the retention of bidding rights has been a major factor in inducing experienced railroad employees to become safety inspectors. Add to that the fact that the skills of railroad operating people are not generally marketable other than on the railroad, and of course, the future recruitment

of qualified people by the FRA and others is going to be an uphill battle.

Similarly, there is no telling how many current FRA inspectors, if required to forfeit accumulated railroad seniority, would elect to forfeit their FRA positions instead, leaving an already understaffed agency with even greater shortages. There can be no doubt, then, that the thousands of railroad employees working in the yards and on the trains will be exposed to a dramatically increased risk of injury resulting from accidents and derailments caused by undetected and uncorrected safety defects.

It is outrageous to RLEA and its constituent organizations that these administrative bodies presume to encroach upon rights guaranteed to railroad workers through collective bargaining. As you know, Congress itself has repeatedly recognized the importance of seniority rights vested through the bargaining procedure in other very important areas of the law,-- for example-- Civil Rights-- and Congress has refused to intrude upon these rights. I cannot overemphasize to you the damage that would occur to the collective bargaining system as we know it in this country if agencies are permitted to do by administrative fiat that which Congress itself has wisely refused to do by legislation or otherwise over the years. For all of these reasons RLEA enthusiastically supports any legislation that would allow retention of reemployment rights.

Finally, we feel a technical correction should be made to section 5 to assure that the affected employee who has already relinquished his reemployment rights will have them reinstated as of the effective date of any such rescission.

Section 6 - Pay Classifications

The Office of Personnel Management (OPM) has published a classification standard which downgrades the majority of the FRA safety inspectors. We share former Secretary of Transportation Brock Adams' and Federal Railroad Administrator John Sullivan's previously expressed beliefs that this downgrade will have a bad effect on railroad safety enforcement. In the first instance, the OPM action has placed the safety positions in grades below the level of skill, experience, knowledge and independence required to perform the jobs. Even more importantly, this downgrade of railroad safety inspectors below a GS-12 and of railroad safety specialists below a GS-13 will truly cripple the FRA's ability to recruit and retain the kind of people whose knowledge and experience are critical to the program. It is widely recognized that virtually the only source of FRA safety inspectors and specialists with the requisite qualifications for the jobs are recruited from the railroad industry itself. Even at the current starting salaries FRA has had difficulty attracting qualified people; in fact roughly half of the recently hired inspectors have taken substantial salary cuts in going to work for FRA. It should be

clear, particularly in these inflationary times, that any further erosion of inspector's salaries will make it virtually impossible to attract qualified candidates. Moreover, any further decrease of FRA's rail safety enforcement will unquestionably result in a greatly increased risk of injury or death due to accidents or derailments caused by undetected and uncorrected safety violations. RLEA supports any amendment which will restore safety personnel's grade classification as essential to FRA's efforts to improve the safety record of the nation's railroads.

Section 7 - Transportation to Lodging Facilities

The 95th Congress wisely recognized that considerations of safety compelled the shortening of the workday for operating railroad workers. Therefore in 1976 your Subcommittee drafted, and Congress adopted, amendments to the Hours of Service Act. Unfortunately a "too-common" phenomenon has come to RLEA's attention-- although the counting of release time starts immediately from the time of the interim release at the designated terminal, some railroads simply do not promptly provide lodging for the employees and of course then the employees' actual rest time is shortened,-- sometimes literally by hours. RLEA supports the amendment in order that the Congressionally mandated guaranteed rest time are to have a meaningful impact toward diminishing employee errors and accidents which result from fatigue.

In conclusion, RLEA hopes that your Committee will consider carefully our views on each of the proposals discussed in my testimony. I might add at this point that RLEA does not oppose the proposed safety amendments offered by the Department of Transportation. In the interests of a safe railroad system, do not shy away from your duties to adopt the suggested safety improvements by RLEA.

Mr. FLORIO. Can I ask how you deal with Mr. Dempsey's contention that Whirlpool does not have a common carrier obligation, whereas the railroads obviously do, and to grant an expanded right in the way that some are suggesting will, in fact, inhibit their ability to go forward with the common carrier obligation?

Mr. MANN. I think there are two areas which immediately come to mind which could tailor this legislation to fit his concerns. One he addressed was weather conditions. I am sure we can deal with weather conditions with respect to safety and hazards.

Secondly, giving the individual himself the right to walk off without some concurrence or approval by the designated labor representative in that yard, on that train or whatever. There can be some measure to protect against willy-nilly everyone walking off doing what they want to do just because they think they have the right. I think that can be tailored.

Mr. FLORIO. Mr. Matsui.

Mr. MATSUI. Thank you, Mr. Chairman.

If I may just proceed on that point, Mr. Mann, it is my understanding that the OSHA standard talks of real danger of death or serious injury, which is the condition which must exist before the employee may either walk off the job or ask for reassignment, whereas in the proposed legislation we talk about imminent danger to safety and health and also we talk, if I am not mistaken——

Mr. MANN. In paragraph 4. That deals with defective equipment, in addition.

Mr. MATSUI. Right, defective equipment. It seems the OSHA standards are much more stringent before the employee would have the ability to walk off or ask for reassignment than proposed in this legislation. Is that your understanding?

Mr. MANN. The OSHA provision, Mr. Matsui, is basically contained in subparagraph 5. The OSHA provision does not have a comparable provision as in paragraph 4.

Mr. MATSUI. Right. What I am saying is that even paragraph 5—and correct me if I am wrong, because I am reading from the staff report here. It indicates that a real danger of death or serious injury must exist, whereas under the standards proposed in the legislation, it is imminent danger to his health and safety.

I realize you could construe that to mean the same thing, but I would have to believe that the OSHA standards require a higher level of danger before the employee has a right to leave. Now, is that your understanding, too?

Mr. MANN. That is correct.

Mr. MATSUI. Would you have any problems if the OSHA stndards were then transplanted into this legislation?

Mr. MANN. No, sir, we would not.

Mr. MATSUI. You would not? Thank you.

Mr. FLORIO. Mr. Madigan.

Mr. MADIGAN. This provision to require transportation for lodging, to require that it be provided so that employees arrive at their lodging within 30 minutes of their release, is there anything in the contracts now referring to that, the management-labor contracts?

Mr. SNYDER. Not to my knowledge. In other words, a time limit after the expiration of 12 hours that they be transported to their lodging? No, not to my knowledge. It is just when it is convenient

for the carrier personnel to come in and transport them. There is nothing in collective bargaining on it.

Now, the type of transportation is in contracts. The type of transportation to be used is a contractual matter.

Mr. MADIGAN. This is a circumstance that arises only at the end of an employee having worked a 12-hour shift?

Mr. SNYDER. That is right. It only applies when he is exhausted. He is out there between terminals, out there in the boondocks someplace, and he is not performing any duties. He is just sitting there waiting, killing time waiting to be properly relieved and transported to his terminal.

Mr. MADIGAN. If a person operates a train from Chicago to Champaign, Ill., they haven't operated the train for 12 hours. But I understand that is the end of their shift. They go off at Champaign and stay overnight in Champaign and go back to Chicago the next morning.

Would the railroad be required to provide them transportation within 30 minutes?

Mr. SNYDER. Only when they are relieved. Now, if he is going into his terminal, this is really not our problem. If he has problems and is relieved between Champaign and Chicago and he is out there in some small community somewhere, this is what we are talking about.

Mr. MADIGAN. Do you mean if the train breaks down?

Mr. SNYDER. If it breaks down or runs into delays, those types of things. There are numerous things that can happen to trains, really, when it is in his terminal like that. Whether it would be Champaign or Chicago wouldn't be the problem.

Mr. MADIGAN. If a train is delayed, say, because there is a train on the track and that train has some kind of mechanical problem, when the guy in the second train has worked 12 hours, does he come out of the train or does he stay in the train and take it in when the problem ahead of him is cleared up?

Mr. SNYDER. That is governed by the supervisor. Emergency provisions were in the last legislation. Under the emergency provisions, if he is out there and there is a breakdown, this is not counted.

Mr. MADIGAN. If a person had their train break down at Gilman, Ill., south of Chicago but north of Champaign, and it was obvious that the train was not going to be able to be moved that night so the engineer is being taken off the train and he is going to be taken on to his designated terminal, Champaign, and we have a requirement they have to come and get him in 30 minutes, how would they comply? How would the railroad comply with that requirement? They really aren't within 30 minutes of anything?

Mr. SNYDER. Well, there would be cases like that where it would probably be impossible in 30 minutes. As I say, this could be changed. Thirty minutes could be changed to within a reasonable length of time, 1 hour say, perhaps 1 hour. I am sure by then, under that type of an arrangement, they could get transportation to them.

Mr. MADIGAN. Thank you, Mr. Chairman.

Mr. FLORIO. Mr. Snyder, I have just a few questions with regard to some of the points you have raised, and previous witnesses have

mentioned the problems associated with alcoholism. I know from previous discussions with you and other representatives of organized labor that you are as concerned about this problem as anyone.

I know of one railroad which has started using a breathalyzer-type device and having random samplings on operating crews. Do you have any thoughts with regard to the desirability of this process?

Mr. SNYDER. I was unaware of that, Mr. Chairman, but I can address myself to the alcohol with which we are all concerned throughout our society, particularly on the railroad, the employees we represent. We are very much concerned with it.

I think industry and labor have been doing something about this on a voluntary basis. I think on approximately 20 railroads, we have a joint alcohol program on 20 of the largest railroads in the country, and we are promoting more of them.

We think the Federal Government can help, not in a regulatory capacity but maybe in assistance with statistics and the necessary things that go with it, by a three-way promotion plan that can be addressed. You are right that we are very much concerned.

Mr. FLORIO. And I think your suggestion in terms of a long-term answer is appropriate, that we have educational programs and attempt to relieve the problem in that way. But I can appreciate from several witnesses, particularly the Safety Board people, that it is an immediate problem in some instances.

What they conveyed to me was that employees feel some peer pressure not to be reporting someone. You work with someone on a daily basis. He is a friend. He shows up in an inappropriate posture. You don't want to go report him. As was indicated from the Safety Board people, that is not the case with regard to the aviation industry.

What is it we can do to bring about a higher degree of voluntary reporting, I suppose, if that is the ultimate end? And failing an effective voluntary system, what should be done to convey to your members, or not to your members to all employees, management and operating, if, in fact it is a problem among management people, that there is a need to go forward and report violations of this already existing rule.

As I understand it, you said something about rule G.

Mr. SNYDER. Rule G.

Mr. FLORIO. This is already a rule. Obviously, if it is a problem that is prevalent and there is a rule, the rule isn't very effective. What is it we can do, and should it be done internally by the unions with the cooperation of management, or do we have to go forward to start having some Federal regulations that will make this a violation of safety procedures in the same way a defective truck would be a violation of safety procedures.

Mr. SNYDER. I don't agree with the Safety Board's approach to this. I don't agree that the employees on the railroads are getting by with it. This is a cardinal rule throughout the industry. It is on every railroad, rule G, and in my number of years experience, I have experienced this in the operation of trains.

Since it is a real tough rule in the industry, you are not going to find many employees who condone his fellow workers acting like

that because he is jeopardizing his life, particularly in operation. Usually what happens if an employee comes drinking on the job, and it has happened to me when I was conducting trains, not with alcohol but with my fellow employees, I would just politely tell him to go home and we would call the crew dispatcher and tell him the gentleman is sick. He was sick and we would get another crewmember.

There might be some delay in the train sometimes, but usually that. Now, if you condone your fellow employee out there on the job with you, then you are not only condoning, your job is at stake because if anything happens out there, then your job is at stake as well as his job and as well as the industry, damaged equipment and those sorts of things, which is costly to the industry.

I think, Mr. Chairman, that perhaps a better coordinated program between labor and management on these various railroads to address it, and maybe more study by FRA with a third party in this would hopefully correct this properly.

Mr. Mann, do you have something you would like to say?

Mr. MANN. Mr. Chairman, there are two points I would like to bring to your attention. One is there is no real data on what role or how much alcohol plays in, if you will, employee error causing an accident. That is one area in which the Federal Railroad Administration should get into the ball game and start looking.

They could do that very simply in their accident report form, have an area there where you would fill out the blanks as to the extent to which any crewmember may or may not have been drinking or participating in drugs.

Mr. FLORIO. I am sure you are not suggesting we have to wait for the accidents to occur to accumulate the data to formulate responses.

Mr. MANN. No, not at all. Obviously not. But we should determine what extent that is playing in accidents and injuries.

The other thing is you raised the issue of what would be our position concerning the use of breathalyzer tests. Well, just off the top of my head, I would say there is a fifth amendment problem that has to be addressed before that is permitted. We would have serious reservations about that, indiscriminate use.

Mr. FLORIO. Of course we are not talking about criminal penalties, so I am not sure the fifth amendment would apply. It is a condition for employment.

Mr. MANN. That is true. That is correct.

Mr. FLORIO. Let me develop another area briefly. You heard, I am sure, the testimony of the people from DOT, FRA, about the complexities and perhaps the confusion of the significance of the bad car order process, and their suggestion that from the 1st of March of this year, there will be a new, hopefully clarified approach to this problem.

Have you had opportunity to look at the new regulations, and perhaps I could address that to your counsel, to get some impression as to whether the previous, somewhat subjective bad car orders are going to be able to be corrected such that employees—and I know this to be the case because they have communicated with me and, I suspect, every one else—feel in certain areas that the bad car order tags are being disregarded.

And, in fact, the railroad's position, I assume, is that they are being disregarded because it is not sufficiently serious to stop the car from being used. Are you convinced that the new regulations will provide for some specificity as to when the car should be used and should not be used?

Mr. MANN. Only as it relates to a Federal Railroad Administration regulation violation. The bad order tag, Mr. Chairman, has been used historically for years. This is nothing new. And there is certainly no misunderstanding by a railroad worker when he is supposed to apply a bad order tag and when he is not suppposed to apply one.

Mr. FLORIO. In accordance with the internal standards of the railroad?

Mr. MANN. Only recently, Mr. Chairman, did we have Federal regulations in rail safety. For 100 years before, it was only internal rules and regulations. The FRA has picked up in some of the areas, and the railroads themselves have continued their internal regulations with respect to safety.

Mr. FLORIO. I assume we can conclude that the Federal violation process or the Federal violation standards are sufficiently delineated that a bad car order attached to a car as a violation of the Federal standards would encompass at least the internal company regulations dealing with safety.

Let me make it clearer. If the internal rules and regulations of the railroad want to be much more expansive than the Federal requirements, if they have higher standards, that is commendable. But the Federal standards should be sufficiently minimal so as to say that if a car order tag is on a car because of a violation of the Federal standards, that that would stop a car from going any further.

Mr. MANN. That is correct. We feel that the regulations are clear enough to prevent that.

Mr. FLORIO. You are concerned about the railroads' practices. If, in fact, they are not required to put a tag on something because it does not violate the Federal standards, as of now they apparently, do not have to adhere to their own internal procedures if they choose not to do so.

Mr. MANN. The abuses we have brought to your attention, Mr. Chairman, relate to Federal safety violations, not internal rules. We are talking about things that are going to cause a derailment accident or injury.

Mr. FLORIO. The things you have pointed out obviously have been prior to March 1. Do you anticipate that the new regulations will deal with the problems you are concerned with? Do you anticipate that railroads, if, in fact, they have violated the bad car order tags, will violate Federal standards in the future?

Mr. MANN. The examples we have brought to your attention involve instances which have occurred since March, and certainly one of the largest rail carriers in this country knows the significance of the March 1 effective date.

Mr. FLORIO. The supplement you provided to me with regard to some of these things really predates March.

Mr. MANN. We do have some March attachments, Mr. Chairman.

Mr. FLORIO. I suppose that my last area of concrn is the question about retribution. We have some instances you have provided to us concerning bad car orders and other safety things. You have given us a couple of different examples, representatives of the UTU, representatives of the Transit Workers Union.

How serious a problem is this? Can you indicate to us there is a pattern of this type of activity where employees are allegedly being harassed because they have taken action by going directly to the Federal authorities?

Mr. MANN. It doesn't permeate all of the railroads, Mr. Chairman, but there are enough. We have hundreds of violations of this type and we can swamp you with those examples. We have chosen not to, but we can, if you wish, and it is not related only to one railroad system. It applies to all of the United States. But it is not on every carrier.

Mr. FLORIO. You have heard Mr. Dempsey say there is already a remedy for such an employee who is harassed because of the performance of his duty as he sees fit with regard to this type of reporting. Do you regard that remedy as a real remedy?

Mr. MANN. It is not or we wouldn't be here, Mr. Chairman. The example we have given you is where the remedy Mr. Dempsey suggests we have has completely failed. If those remedies were effective, we would not be here complaining.

Mr. FLORIO. His suggestion is whether the employee pursued the grievance procedure and what the outcome was. That seemed to be what Mr. Dempsey was suggesting. If, in fact, the employee is right, the grievance procedure would vindicate him and he would be compensated for wrongful termination, demotion, or whatever.

Mr. SNYDER. Mr. Chairman, it is not normal in the industry to pursue collective bargaining safety matters, and I will tell you the reason why. You cannot strike on unsettled grievances, small grievances, whether it is time claims or anything else, even safety matters.

So we have to rely on rules, regulations, and safety statutes to police this. There is no recourse for the employee out there. If you follow that route without the regulations and you just report it to his supervisor, this would be a continuous thing which would just pile up because there is no enforcement.

Mr. FLORIO. Mr. Snyder, we thank you very much for your help.

Our last witness this afternoon is Mr. Paul Rodgers, the administrative director and general counsel of the National Association of Regulatory Utility Commissioners.

Mr. Rodgers, we thank you for your patience. We welcome you to the committee.

Your statement will be incorporated into the record in its entirety, and we would ask you to proceed in a summary fashion.

We ask you to introduce your colleague.

STATEMENT OF PAUL RODGERS, ADMINISTRATIVE DIRECTOR AND GENERAL COUNSEL, NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS, ACCOMPANIED BY PAMELA E. SOMERS, DIRECTOR OF CONGRESSIONAL RELATIONS

Mr. RODGERS. Thank you very much, Mr. Chairman.

I am accompanied today by Pamela Somers, our director of congressional relations. I will be brief in my statement since it is a part of the record.

To begin with, we support authorizations for the State grant-in-aid program, either by outright appropriation or by carryover from preceding years, of $3.5 million for the fiscal year ending September 1981, and $3.5 million for the fiscal year ending September 1982.

As the subcommittee is aware, the use of the State commissions to the extent they have the resources of the national safety program to get the job done would be half of what it costs the Federal Government to do it, since the matching is on a 50–50 basis. That, of course, is reflected by statistics attached to our testimony and the testimony of others today.

Railroad safety continues to be a very serious problem in this country. We are pleased that the FRA is apparently making some progress in stimulating State participation, but it has been a very long time because they are now 10 years into the safety program established by the 1970 act.

In our statement we specifically support two bills pending before the subcommittee, H.R. 3785 and H.R. 4454, which were, in effect, drawn by the Tennessee commission and which go somewhat beyond what the NARUC had asked for previously.

While the committee is aware of the bills, there are two specific amendments proposed by the NARUC for adoption today and they are set forth in the footnotes on pages 4 and 5 of our statement. The first of these amendments, footnote 1 on page 4, would permit the States to have immediate access to Federal district court to restrain safety violations.

Now, it is my understanding of the jurisprudence of this country that virtually anyone can seek resort to the courts to address alleged grievances; however, under the railroad safety program, a State commission cannot resort to a Federal district court until after 90 days has expired from the time the State commission reported the violation to FRA.

You are not talking about State courts but Federal courts. It seems to me that the thrust of the 90-day period is that the Federal judiciary cannot be trusted. The truth of the matter is that the State commission would have to put on a very strong case in order to get a Federal district court to issue an injunction order to restrain a safety violation. We think psychologically this would give the State commissions a greater impetus in getting involved in this program.

[Testimony resumes on p. 210.]

[Mr. Rodgers' prepared statement and attachments follow:]

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE
SUBCOMMITTEE ON TRANSPORTATION AND COMMERCE

STATEMENT OF THE
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ON

PROPOSED AMENDMENTS TO THE FEDERAL RAILROAD SAFETY ACT OF 1970

MARCH 25, 1980

Mr. Chairman and Members of the Subcommittee:

My name is Paul Rodgers and I am the Administrative Director and General Counsel of the National Association of Regulatory Utility Commissioners, commonly known as the "NARUC". I have served in such capacity since November 1, 1965. Accompanying me today is Pamela E. Somers, NARUC Director of Congressional Relations.

The NARUC is a quasi-governmental nonprofit organization founded in 1889. Within its membership are the governmental agencies of the fifty States and of the District of Columbia, Puerto Rico, Guam, and the Virgin Islands engaged in the regulation of utilities and carriers. Our chief objective is to serve the public interest by seeking to improve the quality and effectiveness of government regulation.

The members of the NARUC appreciate your invitation to make their views known on proposed amendments to the Federal Railroad Safety Act of 1970 [45 U.S.C., Sec. 421, et seq.].

Authorization of Appropriations for
State Safety Programs for Fiscal Years 1981 and 1982

The members of the State regulatory agencies across the Nation vigorously support an appropriation authorization in the amount of $3.5 million for the fiscal year ending September 30, 1981, and an additional $3.5 million for the fiscal year ending September 30, 1982, to carry out State safety programs under Section 206(d) of the Federal Railroad Safety Act of 1970 [45 U.S.C.A., Sec. 435(d)].

The program is administered by means of a Federal-State partnership, including State certification similar to the certification principles set forth in the Natural Gas Pipeline Safety Act of 1968. Those States certified to carry out investigative and surveillance activities on behalf of the DOT Secretary and those

States which have entered into agreements with the Secretary provide money and manpower to ensure that safety regulations written in Washington, D.C. are, in fact, implemented throughout the country.

The provision of such financial assistance to State agencies, on a matching basis, will reduce the need for establishing a large Federal field staff and thereby permit the Congress to implement its national safety programs for far less than what it would otherwise cost for the Federal Government to assume the entire financial burden. In other words, the use of matching funds would in effect pull State money into the Federal programs. Moreover, it provides incentive for the States to sponsor more comprehensive enforcement programs in support of the Federal scheme.

There are currently 30 States participating, with 82 inspectors including trainees. A survey showing the status of State participation is attached as Appendix A. It is hoped that there will be 180 State inspectors by fiscal year 1981, and the $3.5 million will be necessary to accommodate the Federal contribution for their support, according to the Federal Railroad Administration.

Strengthened State Participation in the Federal Railroad Safety Program

Attention must also be directed to intensifying Federal and State enforcement efforts under the Railroad Safety Act of 1970. Although the 1970 Act was adopted in response to the increasing number of rail accidents throughout the Nation, the Act has not succeeded in assuring safe operating conditions. Instead, the national rail safety situation continues to deteriorate. Attached as Appendix B is Table H4 from the FRA's Accident/Incident Bulletin No. 147 for the Calendar Year 1978, dated October 1979, which shows that Casualties per Million Train Miles has increased from 86.43

in 1976 to 98.66 in 1978. In 1978 alone, 1,646 people lost their lives on the railroads and another 72,545 were injured.

The members of the NARUC are also concerned that President Carter's recent proposal to dramatically increase the use of coal in this country may well precipitate an unprecedented increase in the number of derailments and disasters throughout the Nation. The additional strain on the rail system brought about by the railroad's efforts to help meet the energy needs of this country during the next two decades will probably create more frequent and more serious derailments.

The members of the NARUC believe the answer is obvious, it is time to return to those State agencies which are willing and able to accept the responsibility, the authority to effectively enforce Federal safety standards in a prompt and efficient manner. Accordingly, NARUC strongly urges the enactment of legislation such as H.R. 3785, a bill to amend the Federal Railroad Safety Act of 1970 to strengthen State enforcement of railroad safety laws, and H.R. 4454, a bill proposing the Federal Railroad Safety Act Amendments. Also attached is a copy of the Resolution supporting comparable legislation in the form of S. 934, a bill proposing the Federal Railroad Safety Act Amendments, which was adopted by the 91st NARUC Annual Convention on December 5, 1979 (NARUC Bulletin No. 52-1979, pp. 20-21).

This legislation would return to the State agencies which are willing and able to accept the responsibility, the authority to effectively enforce Federal safety standards in a prompt and efficient manner.

The legislation would amend Section 207 of the Federal Railroad Safety Act of 1970 in order to improve enforcement of Federal

railroad safety standards by granting State regulatory agencies the authority to impose civil penalties and to seek immediate injunctive relief in a U.S. District Court when the safety laws have been violated. Under present law (45 U.S.C., Sec. 436), a participating State agency may only report violations to the FRA and the State agency is helpless to correct the violations, no matter how dangerous they may be, unless FRA takes no action for 90 days, in which case the State agency can seek injunctive and other relief in the Federal District Court. The independent enforcement mechanisms for the State agencies provided in the legislation would significantly strengthen the enforcement of rail safety laws.1/

In addition to supporting the amendment of the 1970 Act proposed by the above bills, the NARUC believes the Nation's rail safety program can be further improved by authorizing the States to participate in investigative activities in connection with all Federal rail safety laws and regulations. The FRA interprets the State participation

1/ Another means for giving the State commissions immediate resort to the Federal district courts for injunctive relief to restrain safety violations, would be to revise Section 207 of the 1970 Act (45 U.S.C., Sec. 436) to read as follows:

"(a) In any case in which the Secretary has failed to assess the civil penalty applicable under section 209 of this title with respect to a violation of any railroad safety rule, regulation, order, or standard issued under this title, or otherwise required by law, within 60 days after the date on which notification was received by the Secretary from a State agency participating in investigative and surveillance activities under the provisions of section 206 of this title, that State agency may apply to the district court of the United States within the jurisdiction of which the violation occurred for the assessment and collection of the civil penalty included in or made applicable to such rule, regulation, order, or standard. The provisions of this section shall not apply in any case in which the Secretary has affirmatively determined in writing that no violation has occurred.

"(b) A State agency participating in investigative and surveillance activities under the provisions of section206 of this title may, with respect to a violation that occurred within the State of any railroad safety rule, regulation, order, or standard issued under this title, or otherwise required by law, apply under section 210 of this title to the district court of the United States within the jurisdiction in which the violation occurred for injunctive relief to restrain any further violation thereof or to enjoin compliance therewith.".

program under Sec. 206(a) of the Federal Railroad Safety Act as only applying to regulations adopted thereunder. State agencies are not authorized to carry out investigative and surveillance activities with respect to other Federal rail safety laws adopted before or after the 1970 Act.[2/] Such an interpretation results in an inefficient use of State inspectors when they are present on railroad property to enforce the 1970 Act, but are not permitted to check for compliance with pre- or post-1970 safety laws. A broadened interpretation of the participation program would eliminate this inefficiency and assure maximum use of State personnel.[3/]

This concludes our prepared statement. I will be happy to answer any questions the members of the Subcommittee may have. Thank you for your time and attention.

2/ The earlier safety laws include the Safety Appliance Acts (45 U.S.C., Secs. 1-16), the Ash Pan Acts (45 U.S.C., Secs. 17-21), the Boiler Inspection Acts (45 U.S.C., Secs. 22-34), the Signal Inspection Act (49 U.S.C., Sec. 26), and the Hours of Service Acts (49 U.S.C., Secs. 61-66). A subsequent safety law is the Hazardous Materials Transportation Act (49 U.S.C., Secs. 1801-1812).

3/ This amendment may be accomplished by adding at the end of Section 206 of the Federal Railroad Safety Act of 1970 a new subsection to read as follows:

> "(g) Notwithstanding any other provision of this title or any other law, a State agency may also participate, in the manner set forth in this section, in carrying out investigative and surveillance activities in connection with railroad safety laws and regulations in effect on the date of enactment of this title or enacted or adopted after such date."

. Appendix A

STATE PARTICIPATION STATUS SUMMARY
November 26, 1979
(Showing Agreement, Certification and Full Certification Status)

State	TRACK		FREIGHT CAR	
	Inspectors	Participation	Inspectors	Participation
Alabama	2	Full Certification	2	Full Certification
Arizona	2-1*	Full Certification	1	Full Certification
Connecticut	1*	Agreement		
Florida	2	Certification	2	Certification
Illinois	3	Agreement		
Indiana	1	Agreement		
Iowa	2	Full Certification		
Kansas	1	Agreement		
Kentucky	1	Agreement		
Louisiana	1	Agreement		
Massachusetts			1	Certification
Maryland	1**	Full Certification	1**	Full Certification
Michigan	4	Full Certification	2	Full Certification
Minnesota	2	Agreement		
Missouri	3	Full Certification		
Nebraska	1**	Agreement	1	Full Certification
Nevada	1*	Agreement		
New Hampshire	1*	Agreement		
New Jersey	3*	Agreement		
New York	2	Agreement	4	Agreement
North Carolina	1*	Agreement	1* **	Agreement
Ohio	3-2*	Agreement	2-1*	Agreement
Oregon	2	Full Certification	2	Full Certification
Pennsylvania	3	Certification	3	Certification
Rhode Island	1*	Agreement	1	Full Certification
South Carolina	1*	Agreement	1	Agreement
Utah	1*	Agreement	1*	Agreement
Vermont	2	Full Certification		
Washington	2	Full Certification	2	Full Certification
West Virginia	3-2*	Agreement	2	Full Certification
TOTALS	53		29	

* Denotes trainee (16 track, 3 equipment)
** Denotes recruiting replacement

TABLE H4. CASUALTIES BY ACCIDENT/INCIDENT, 1976-1978

Class of Acc/Inc by Year	Total Fatal	Total Non Fatal	Total Casualties	Total Accidents	Casualties per Million Train Miles
Train Accidents					
1976	152	1,279	1,431	10,248	1.85
1977	108	985	1,093	10,362	1.46
1978	139	1,911*	2,050	11,277	2.73
Train Incidents					
1976	1,259	12,648	13,907	12,368	17.94
1977	1,340	14,876	16,216	14,611	21.62
1978	1,427	15,014	16,441	14,918	21.86
Non-Train Accidents					
1976	219	51,404	51,623	50,535	66.63
1977	82	52,006	52,088	51,601	69.45
1978	80	55,620	55,700	55,391	74.07
All Accidents					
1976	1,630	65,331	66,961	73,151	86.43
1977	1,530	67,867	69,397	76,574	92.52
1978	1,646	72,545	74,191	81,856	98.66

*Included is an ICG railroad commuter train on January 26, 1978 which resulted in 558 non-fatal casualties.

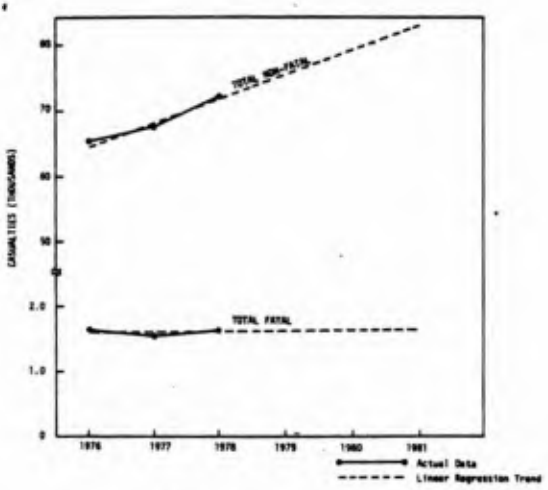

FIGURE L. FATAL AND NON-FATAL CASUALTIES BY ACCIDENT/INCIDENT, 1976-1978

Appendix C
Convention Floor Resolution No. 14

Resolution Supporting S. 934
to Amend the Railroad Safety Act of 1970

WHEREAS, The Railroad Safety Act of 1970 was adopted in response to a growing number of rail accidents throughout the Nation; and

WHEREAS, The Act granted authority to the Secretary of Transportation and the Federal Railroad Administration to promulgate and enforce uniform rail safety standards; and

WHEREAS, These Federal rules preempt State regulations, except in very limited circumstances; and

WHEREAS, The national safety act of 1970 has not succeeded in assuring safe operating conditions on rail tracks and roadbeds throughout the Nation; rather the national railroad safety situation has deteriorated substantially since 1970; and

WHEREAS, There have been many catastrophes, including the Waverly, Tennessee, catastrophe of February 1978, in which 16 persons died; and

WHEREAS, The Federal Railroad Safety Act of 1970 has certain provisions contemplating State participation in investigation and enforcement of railroad safety standards; but these provisions and the regulations adopted with respect to them have not proven to facilitate effective State participation and have not resulted in sufficiently effective enforcement of Federal safety standards and programs, and in fact have impaired State standards and programs; and

WHEREAS, The number of derailments and instances of evacuation have steadily increased; and

WHEREAS, The Tennessee Congressional Delegation has caused to be introduced in the United States Senate S. 934 to amend the Railroad Safety Act of 1970 in order to improve enforcement of Federal railroad safety standards by granting State regulatory agencies the authority to impose penalties and to seek immediate injunctive relief in U.S. District Court when railroad safety laws have been violated; now, therefore, be it

RESOLVED, By the National Association of Regulatory Utility Commissioners, assembled in its Ninety-first Annual Convention in Atlanta, Georgia, that the United States Congress amend the Railroad Safety Act by adoption of S. 934 to facilitate more effective enforcement of Federal and State standards and programs; and be it further

RESOLVED, That a copy of this resolution be sent to the President of the United States, governors, each Member of Congress, and to members of the news media.

Sponsored by the Tennessee Public Service Commission

Adopted December 5, 1979

Reported NARUC Bulletin No. 52-1979, pp. 20-21

Mr. FLORIO. Are you talking about all State commissions or just certified ones?

Mr. RODGERS. Just those participating in the program. You can participate by certification or agreement. Approximately 30 States are now participating, and that is reflected in a chart attached to our testimony. As I say, I think this would encourage further State participation.

You see, the Federal railroad safety program is quite similar to the Federal/State partnership established in the Natural Gas Pipeline Safety Act of 1968, in which you have virtually every State commission participating. But after 10 years of effort, we have only 30 States participating in the Federal railroad safety program.

The other amendment, we think, would make for a better utilization of State manpower. While the 1970 act has a pretty good program for Federal/State participation or State participation, it only applies to State regulations adopted under the 1970 act. When Congress adopted the 1970 act, it left standing the old safety laws which were not rolled in.

Also, we have had new safety laws since that time. We think that the States participating under the 1970 act should be permitted to enforce Federal safety standards under both the old acts and the new acts which would make for better utilization of State manpower.

We do not think it makes any sense to have State inspectors on the scene, but are unable to check for other safety violations while they are there.

Mr. FLORIO. What were the types of things that would be encompassed under that broader scope?

Mr. RODGERS. That is set forth in footnote 2 of our testimony on page 5. It would be the Safety Appliance Acts, the Ash Pan Acts, the Signal Inspection Act, and the Hours of Service Acts. The

substantive safety law, the 1970 act, is the Hazardous Material Transportation Act, and this would give a better State enforcement program to that, as well.

Mr. FLORIO. As you, I think, heard this morning, the committee is sympathetic to expanding the opportunity to having more safety personnel, and certainly the State is a very good reservoir for drawing on these people. Some of the criticisms I have heard over the years, in my own State and others, is that State inspectors are difficult to encourage to meet the standards because the suggestion is that Federal standards are too high.

In fact, the Federal people say they are not as enthused as they could be about State regulatory agencies assuming the responsibilities they have because they maintain the personnel are not sufficiently qualified. In fact, many of the regulatory agencies, my own State being one of them, assume a prime purpose of something other than railroads. They are more into regulatory authority in terms of gas prices.

The railroad aspect is a very small proportion; therefore, the expertise that has been developed is not as great as it could be. You heard this morning, that the authorization for this program is down. That is, the requested authorization is down from the previous years by a substantial amount, it is $2 million down from $3.5 million.

You have also heard one of the witnesses state there was money left over from last year. Yet, at the same time some of the States are not able to hire State inspectors because they haven't got the resources.

Do you have any overall suggestions as to how this program can be modified, if in fact it should be modified, to encourage the States to do more of this so they can move to the position of the Federal authorities in terms of taking responsbility for State inspections?

Mr. RODGERS. The Federal qualifications are quite high. In fact, we understand the FRA has trouble recruiting people with the kind of specifications they have. Of course, one of the NARUC's complaints of the last 10 years is that the Federal qualifications are really too high, because by setting the qualifications high, you can certainly cut out a lot of people.

It is a little bit like saying only doctors can administer first aid. If you had a rule saying only doctors could administer first aid, that would mean first aid would be a great deal better administered than it is. But the truth is a lot of people would die in the meantime since there would be so few people to provide first aid.

So we think, frankly, the FRA should take a look, because if the qualifications are a bit too high, it will limit this very serious safety battle nationally. It would be like the United States turning away Allied Forces during World War II because we didn't think they were qualified to help us.

We think the qualifications should be looked at carefully. Some of the State commissions have had a problem in getting people who meet these qualfications and a problem in paying an appropriate salary. In the competition of the State salary structure, there is a pecking order, and of course, railroad safety inspectors cannot make more than other officials higher up in other areas.

This is a problem, we understand, with the New York Department of Transportation, but the States are trying to meet these standards, and, of course, we are making progress very, very slowly. I think if the qualifications were dropped a bit for the State commissions, it would stimulate much more State participation. State action would still be backed up by the Federal Railroad Administration inspectors in that State. They will still be there. It is just a matter of complementing the Federal inspection force to put more people into work.

Mr. FLORIO. On your suggestion about enforcement authority and litigation authority being shifted to the State, it is my understanding that under the law as it is now, the States have the ability to do that. Of course, they have to wait 90 days, but they have never done it.

Is this the case? Can you verify that fact?

Mr. RODGERS. I would not quarrel with that because 90 days is a long time. I think it would stimulate State interest in enforcement more if they could go into Federal district court and seek an injunction when they found a violation. This idea came from the Tennessee Commission, which had a very bad accident in Tennessee a couple of years ago. They have become very concerned about this.

I think in terms of State morale and State participation, this would be an important amendment. Now, of course, if the States do not use the amendment, there would be no change from the present law. But it seems to me this is a good safety valve to let the States have access to Federal district courts for serious safety violations.

Mr. FLORIO. What do you understand is the rationale for the 90-day period?

Mr. RODGERS. I think that is time to give the FRA a chance to process the violation and see where things stand. It is a bureaucratic lag time, sir.

Mr. FLORIO. My difficulty with that is if on the one hand you maintain the State system has been certified and the people there are equally competent to do what the Federal inspectors do, they should have equal access to the court. On the other hand, if someone is saying they should not have equal access to the court, that is really saying that the State inspection certification is not very meaningful. In fact, it would indicate that the State system and the State inspectors are not up to snuff and therefore their activities and recommendations have to be reviewed.

I think it is very important we find out which is the case. If, in fact, the State inspection system is really not comparable to the Federal system, then maybe we should provide for this lag.

Mr. RODGERS. I would imagine they are not seeking injunctive relief in any less than 90 days for a violation reported by their own FRA inspectors. Of course, you have the State participation status set forth in appendix A of our summary, and it only shows there are about nine States given full certification, several given certification and most are given agreements.

The FRA has not been reckless in working these State people into the program. I am sure where they have listed full certifica-

tion, those State people are equally as good as the Federal inspectors.

Mr. FLORIO. If we are only talking about nine States being fully certified after all of this time.

Mr. RODGERS. But you have 30 participating overall.

Mr. FLORIO. But it is only in limited areas; isn't that the case?

Mr. RODGERS. No, I think the main difference between agreement and certification is that while the State has inspectors, they are not up to the Federal qualifications, so they have them listed as agreements. But they would be participating in track safety and freight car safety.

Mr. FLORIO. Do you see any great change, then, if your other suggestion about providing to the State authorities full jurisdiction over all rail safety——

Mr. RODGERS. That would be the same kind of jurisdiction they have now with respect to track and freight cars. That would be under the FRA certification program and it would all be controlled by the FRA, so you are not just turning them loose.

Mr. FLORIO. I know, but you said some of the areas were boilers and things of that sort. I would think there would have to be a modification in the certification process to make sure you have personnel on the State level who know something about those areas.

Mr. RODGERS. You could certainly depend on the FRA to do that because they have been very cautious in doing this. And, of course, if this kind of amendment were adopted, it would mean that the FRA would set up a program like they have for track and freight car to make sure that the State people seeking to enforce these other areas are qualified or else they would not be admitted to the program.

So you would have the same protection in those areas that you have now for track and freight car.

Mr. FLORIO. I thank you very much for your help this morning.

Mr. RODGERS. Thank you. We appreciate your time.

Mr. FLORIO. The committee stands adjourned.

[Whereupon, at 1:40 p.m., the subcommittee adjouned.]

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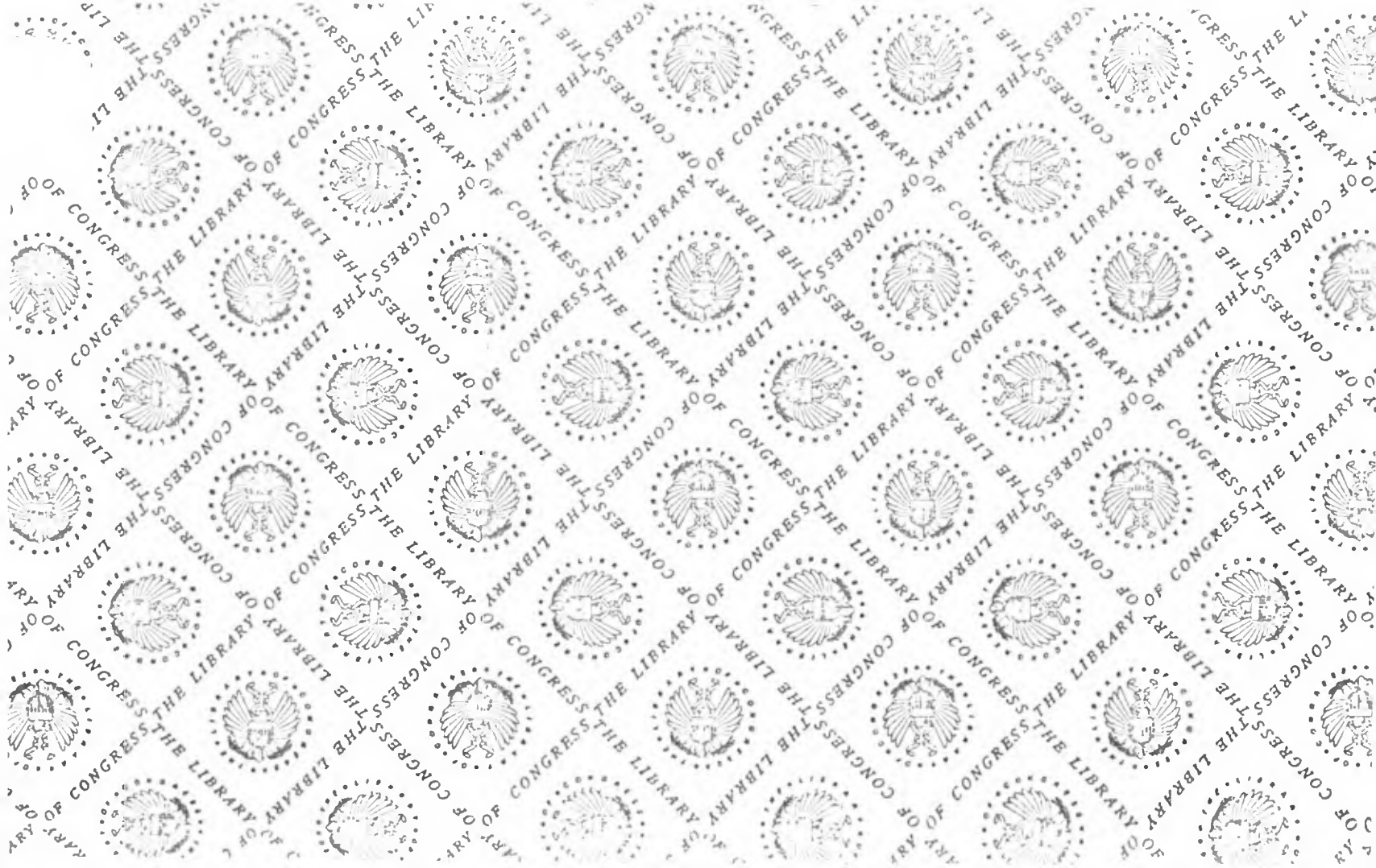
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